

NO. 45,215-A

LLOYD BRYANT, ET AL § IN THE COUNTY COURT
 §
VS. § AT LAW NUMBER TWO
 §
U.S. GYPSUM COMPANY, ET AL § SMITH COUNTY, TEXAS

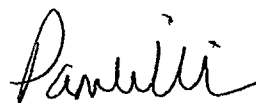
**DEFENDANT THE HILL AND GRIFFITH COMPANY'S SECOND SUPPLEMENTAL
RESPONSES TO PLAINTIFFS' REQUEST FOR PRODUCTION**

TO: Plaintiffs, by and through their attorneys of record, Mr. Richard Nemeroff, BARON & BUDD, 3102 Oak Lawn Avenue, Suite 1100, Dallas, Texas 75219 and Mr. Jimmy M. Negem, NEGEM, BICKHAM & CLARK, 440 South Vine, Tyler, Texas 75702.

COMES NOW, THE HILL AND GRIFFITH COMPANY, one of the Defendants in the above entitled and numbered cause, and pursuant to Rule 196 of the Texas Rules of Civil Procedure and the Court's ruling on August 30, 2002, makes and files this its First Supplemental Responses to Plaintiffs' Request for Production of Documents served upon its attorney of record, which answers are attached hereto.

Respectfully submitted,

ADAMS & COFFEY, P.C.



KENT M. ADAMS

State Bar No. 00869200

PAMELA J. WILLIAMS

State Bar No. 00791936

222 W. Las Colinas Boulevard

Suite 1730N

Irving, Texas 75039

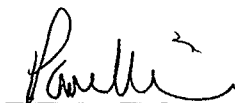
PHONE: (972) 506-6600

FAX: (972) 506-6620

ATTORNEYS FOR DEFENDANT,
THE HILL AND GRIFFITH COMPANY

CERTIFICATE OF SERVICE

This will certify that a true and correct copy of the above and foregoing has been forwarded to all known counsel of record in accordance with the Texas Rules of Civil Procedure on this the 11th day of September, 2002.

A handwritten signature in cursive script, appearing to read 'Pamela J. Williams', is written above a horizontal line.

PAMELA J. WILLIAMS

**DEFENDANT'S SECOND SUPPLEMENTAL RESPONSES TO PLAINTIFFS'
REQUEST FOR PRODUCTION OF DOCUMENTS**

REQUEST NO. 1: Documents reflecting the corporate structure of each of the Defendant's companies for the past seventy-five years.

RESPONSE: See attached.

REQUEST NO. 2: Documents reflecting the names of persons having management authority in each of the Defendant's companies and the manner in which such authority is assigned functionally and/or geographically for the past seventy-five years.

RESPONSE: See attached.

REQUEST NO. 4: All internal Memoranda of any of the Defendant's companies relating to the marketing of the product for the past seventy-five years.

RESPONSE: None.

REQUEST NO. 5: All advertising, foreign and domestic, done by any of the Defendant's companies, relating to the product for past seventy-five years.

RESPONSE: See attached.

REQUEST NO. 9: All catalogues, pamphlets, brochures, or any printed or published descriptions of the Defendant's product(s) made the basis of this lawsuit, prices of such products or services, or other information relating thereto.

RESPONSE: See attached.

REQUEST NO. 12: Any and all communications, correspondence, inquiries, meetings, conversations, agreements, understandings, relations or contracts of any kind between or among Defendant and Tyler Pipe Industries, Inc., Western Foundry, and Sterling Faucet for the past seventy-five years.

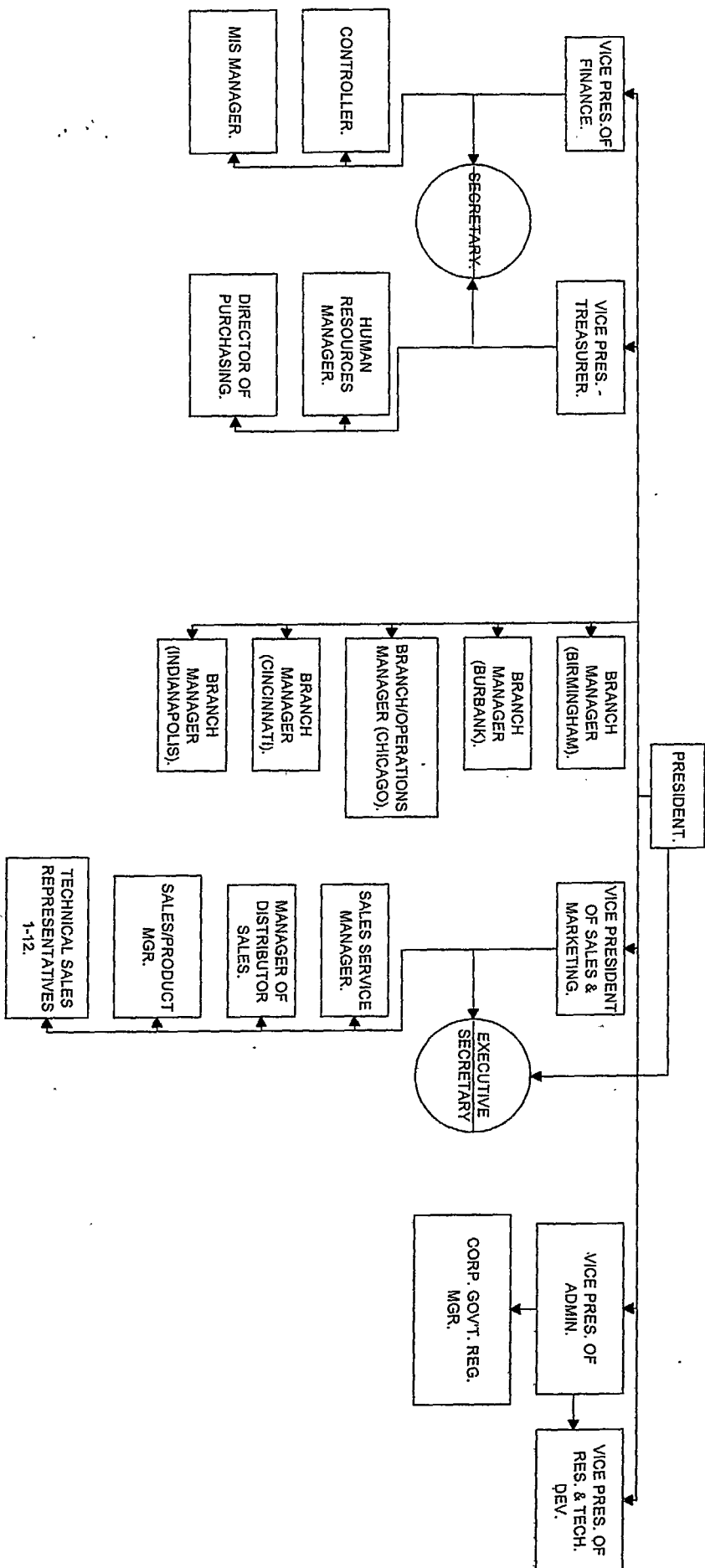
RESPONSE: None.

REQUEST NO. 16: A true and correct copy of all warnings or instructions attached to the packaging of the products processed or distributed by Defendant which contained silica. For each warning or instruction, attach the dates in which those warnings or instructions were used and the specific product upon which they were used.

RESPONSE: See attached.

THE HILL AND GRIFFITH COMPANY CORPORATE ORGANIZATIONAL CHART

CORP-FLOW-00001
 Revision: 7.4
 Date: 4-22-02
 Author: RH
 Approved: GEF
 P. 1 of 2



DATE 12/25/2011

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479-8147-31

02000000

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3032-00

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12/31/84

THE HILL & GRIFFITH COMPANY
REPORT NO. 98
TOP 300 CUSTOMERS

PAGE 187

PRODUCT SALES BY CUSTOMER BY SALESMAN

67DICKKEY

CUST.		#PRODUCTS		***** THIS MONTH *****		***** YEAR-TO-DATE *****	
NO.	CUSTOMER NAME	TR GP CODE	PRODUCT DESCRIPTION	THIS YEAR	LAST YEAR	THIS YEAR	LAST YEAR
03-000-3644	EMULSION DC-HV 490 4400 D			2,349.60	.00	2,349.60	4,276.80
03-000-3649	EMULSION DC-8 4400 DRUMS			1,566.40	.00	1,566.40	.00
03000	GROUP TOTAL			3,916.00	.00	3,916.00	4,276.80
03	*** TRANSACTION TOTAL			3,916.00	.00	3,916.00	4,276.80
05-000-0000	DIRECT SHIPMENT			.00	.00	.00	1,657.20
05000	GROUP TOTAL			.00	.00	.00	1,657.20
05-040-0000	FEDERAL ORE			.00	2,137.90	1,022.40	6,504.00
05040	GROUP TOTAL			.00	2,137.90	1,022.40	6,504.00
05	*** TRANSACTION TOTAL			.00	2,137.90	1,022.40	8,161.20
****	CUSTOMER TOTAL			17,122.67	7,061.26	47,183.56	72,383.71

67DTICKFY

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***** YEAR-TO-DATE *****
THIS YEAR      LAST YEAR

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•00	•00	6,768.45
•00	•00	6,768.45

12/31/85

THE HILL & GRIFFITH COMPANY

REPORT NO. 98

PAGE 158

PRODUCT SALES BY CUSTOMER BY SALESMAN

TOP 300 CUSTOMERS

67DICKY

CUST. NO.		CUSTOMER NAME		PRODUCT		PRODUCT DESCRIPTION		THIS YEAR		LAST YEAR		THIS YEAR		YEAR-TO-DATE		LAST YEAR	
TR GP CODE		TR GP CODE		PRODUCT		PRODUCT DESCRIPTION		THIS YEAR		LAST YEAR		THIS YEAR		YEAR-TO-DATE		LAST YEAR	
01-059-6785		TYLER PIPE BULK PREMIX		14,739.74		.00		96,918.78		.00		.00		.00		.00	
01-059-6803		TYLER PIPE 100# BAGS PREM		.00		.00		10,481.59		.00		.00		.00		.00	
01059		GROUP TOTAL		14,739.74		.00		107,400.37		.00		.00		.00		.00	
01		TRANSACTION TOTAL		14,739.74		12,614.67		245,049.03		134,046.95		.00		.00		.00	
02-001-0009		PALLET & PALLETIZING		.00		16.00		.00		.00		.00		.00		.00	
02-001-0040		PALLET & PALLETIZING		.00		576.00		8,376.00		9,120.00		.00		.00		.00	
02001		GROUP TOTAL		.00		592.00		8,376.00		9,096.00		.00		.00		.00	
02		TRANSACTION TOTAL		.00		592.00		8,376.00		9,096.00		.00		.00		.00	
03-000-3644		EMULSION DC-HV 490 440# D		.00		2,349.60		10,867.83		7,163.20		.00		.00		.00	
03-000-3649		EMULSION DC-8 440# DRUMS		.00		1,566.40		1,566.40		1,566.40		.00		.00		.00	
03000		GROUP TOTAL		.00		3,916.00		9,321.40		8,729.60		.00		.00		.00	
03		TRANSACTION TOTAL		.00		3,916.00		9,321.40		8,729.60		.00		.00		.00	
05-040-0000		FEDERAL ORE		.00		.00		1,123.20		6,369.40		.00		.00		.00	
05040		GROUP TOTAL		.00		.00		1,123.20		6,369.40		.00		.00		.00	
05-130-0000		MILWAUKEE CHAPLET & MFG.		.00		.00		3,944.02		.00		.00		.00		.00	
05130		GROUP TOTAL		.00		.00		3,944.02		.00		.00		.00		.00	
05		TRANSACTION TOTAL		.00		.00		5,067.22		6,369.40		.00		.00		.00	
****		CUSTOMER TOTAL		14,739.74		17,122.67		267,813.65		208,241.95		.00		.00		.00	

12/31/86

THE HILL & GRIFFITH COMPANY

REPORT NO. 98

TOP 300 CUSTOMERS

PAGE 139

PRODUCT SALES BY CUSTOMER BY SALESMAN

67DICKKEY

CUST. NO.

CUSTOMER NAME

#PRODUCT**

***** THIS YEAR

THIS MONTH

LAST YEAR

YEAR-TO-DATE

LAST YEAR

52900 TYLER PIPE INDUSTRIES

01-007-6358 SEBONY CORE COMPOUND #1 10

86

85

86

85

01-013-6895 SEACAL D-4 50# BAGS

86

85

86

85

01-013-6902 SEACAL D-4 100# BAGS

86

85

86

85

01-013-6902 SEACAL D-4 100# BAGS

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01-013-6902 SEACAL D-4 100# BAGS

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01-013-6902 SEACAL D-4 100# BAGS

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01-013-6902 SEACAL D-4 100# BAGS

86

85

86

85

CUSTOMER TOTAL

11,499.11

14,739.74

215,550.62

267,813.65

TOP 300 CUSTOMERS

PRODUCT SALES BY CUSTOMER BY SALESMAN

67DICKKEY

CUST. NO.	CUSTOMER NAME	*PRODUCT**	TR GP CODE	PRODUCT DESCRIPTION	***** THIS MONTH *****	***** YEAR-TO-DATE *****
					THIS YEAR	LAST YEAR
52800	TYLER PIPE INDUSTRIES					
01-007-6062	EBONY G CORE COMPOUND 50#				.00	.00
01007	**	GROUP TOTAL			.00	1,849.80
01-013-6902	SEACOCAL D-4 100# BAGS				.00	.00
01013	**	GROUP TOTAL			.00	9,966.23
01-021-6918	SUPER SLIK LIQUID 55 GAL.				.00	7,218.75
01021	**	GROUP TOTAL			.00	7,218.75
01-027-6166	SLIK BOX 260# DRUMS				.00	.00
01027	**	GROUP TOTAL			.00	3,289.00
01-059-6367	TYLER PIPE MOLD MASTER 8U				2,546.73	.00
01-059-6375	TYLER MOLD MASTER CARBONI				5,064.66	.00
01-059-6803	TYLER PIPE 100# BAGS PREM				.00	.00
01-059-6807	TYLER MATCHMASTER 100# BA				5,496.65	.00
01059	**	GROUP TOTAL			13,128.04	119,473.30
01	***	TRANSACTION TOTAL			13,128.04	7,218.75
02-001-0009	PALLET & PALLETIZING				.00	128.00
02-001-0040	PALLET & PALLETIZING				225.00	.00
02001	**	GROUP TOTAL			225.00	128.00
02	***	TRANSACTION TOTAL			225.00	128.00
03-000-3644	EMULSION DC-HV 490 440# D				.00	.00
03000	**	GROUP TOTAL			.00	.00
03	***	TRANSACTION TOTAL			.00	.00

PRODUCT SALES BY CUSTOMER BY SALESMAN

67DICKY

CUST.
NO.

CUSTOMER NAME

52800 TYLER PIPE INDUSTRIES

*PRODUCT**
TR GP CODE

PRODUCT DESCRIPTION

THIS MONTH
THIS YEAR LAST YEAR***YEAR-TO-DATE***
THIS YEAR LAST YEAR

1989

1988

01-013-6902 SEACONAL D-4 100# BAGS
01013 *** GROUP TOTAL

.00 .00 4,444.67 5,301.29

01-021-6918 SUPER SLIK LIQUID 55 GAL.
01021 *** GROUP TOTAL

.00 .00 7,700.00 .00

01-059-6375 TYLER MOLD MASTER CARBONT
01-059-6803 TYLER PIPE 100# BAGS PREM
01-059-6807 TYLER MATCHMASTER 100# BA
01059 *** GROUP TOTAL.00 .00 33,641.91 .00
.00 .00 13,852.73 10,848.78
.00 .00 47,494.64 10,848.78

01 *** TRANSACTION TOTAL

.00 .00 59,639.34 16,120.07

02-001-0009 PALLET & PALLETIZING
02-001-0040 PALLET & PALLETIZING
02001 *** GROUP TOTAL.00 .00 200.00 .00
.00 .00 945.00 784.00
.00 .00 1,145.00 784.00

02 *** TRANSACTION TOTAL

.00 .00 1,145.00 784.00

03-000-3644 EMULSION DC-4V 440# D
03000 *** GROUP TOTAL.00 .00 4,813.60 .00
.00 .00 4,813.60 .00

03 *** TRANSACTION TOTAL

.00 .00 4,813.60 .00

05-000-0000 DIRECT SHIPMENT
05000 *** GROUP TOTAL.00 .00 3,894.00 .00
.00 .00 3,894.00 .0005-130-0000 MILWAUKEE CHAPLET & MFG.
05130 *** GROUP TOTAL.00 .00 3,174.00 4,104.00
.00 .00 3,174.00 4,104.00

05 *** TRANSACTION TOTAL

.00 .00 7,068.00 4,104.00

*** CUSTOMER TOTAL

.00 .00 72,665.91 24,008.07

12/31/72

THE HILL & GRIFFITH COMPANY

REPORT NO. 98

TOP 300 CUSTOMERS

PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY 17

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CUSTOMER NAME: TA GP CODE: PRODUCT DESCRIPTION: THIS YEAR: LAST YEAR: THIS YEAR: LAST YEAR:

52800	LYTEN PIPE INDUSTRIES	01-07-6058	CORE COMP. - NO. 1 EBONY	GROUP TOTAL	11,386.46	8,846.94
		01-07	**		11,386.46	8,846.94
		01-09-6635	CORE PASTE - RED CHIEF	GROUP TOTAL	2,182.75	1,489.91
		01-09	**		2,182.75	1,489.91
		01-13-6902	SEAL COAL. NO. 04 - REG	GROUP TOTAL	2,088.46	13,944.89
		01-13	**		2,088.46	13,944.89
		01-23-6159	E - 2 DRY MOLD SPRAY	GROUP TOTAL	2,298.40	24,294.71
		01-23	**		2,298.40	24,294.71
		01-27-6166	SLIK BOX 215-15-200	GROUP TOTAL	780.00	11,129.74
		01-27-6182	PYROSEAL REG MUD COMPOUND	GROUP TOTAL	780.00	7,120.41
		01-27	**		780.00	585.00
		01-53-6458	CORE COMPOUND - NO. 1	GROUP TOTAL	1,083.50	2,654.58
		01-53	**		1,083.50	2,654.58
		01	***	TRANSACTION TOTAL	6,438.26	1,349.40
		03-00-2627	H.C. WESTERN BENTONITE	GROUP TOTAL	1,944.81	1,944.81
		03-00-2165	PURITE	GROUP TOTAL	531.25	1,800.00
		03-00-3357	NO ALBANY SAND	GROUP TOTAL	13.33	196.05
		03-00-3536	MOROC CORE PASTE WHITE	GROUP TOTAL	2,509.39	1,090.00
		03-05-3482	E 2 BOND SPECIAL IN DRUMS	GROUP TOTAL	565.44	1,090.00
		03-05-3867	MAR CAN. E2 BOND 50 TP IN	GROUP TOTAL	643.94	1,090.00
		03-05	**		643.94	1,090.00

12/31/72

THE HILL GROUP
REPORTING
TOP 100 CUSTOMERS
PRODUCT SALES BY CUSTOMER BY SALESMAN

PAGE 386

CUSTOMER NO. 1A GP CODE PRODUCT DESCRIPTION THIS YEAR LAST YEAR THIS YEAR LAST YEAR

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

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03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

03-08-3333 HIGHERWAY ELECTRO 17,688.20 1,666.50 4,821.83 1,286.05

12/31/74

CUST.

CUSTOMER NAME

PRODUCT

TR GP CODE

PRODUCT DESCRIPTION

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

52800 TYLER PIPE INDUSTRIES I

01-009-0435 CORE PASTE - RED CHIEF

01009 **

GROUP TOTAL

1974

1973

1974

1973

01-013-6902 SEA COAL NO 04 - REG

01013 **

GROUP TOTAL

5,067.10

1,566.00

50,203.95

19,188.37

01-015-6109 CHARBO H - CRUDE FURAG

01015 **

GROUP TOTAL

.00

.00

2,709.88

.00

01-021-6912 PARTING SCOTCH LIQUID

01021 **

GROUP TOTAL

.00

.00

665.50

222.20

01-023-6150 E - 2 DRY MOLD SPRAY

01023 **

GROUP TOTAL

.00

4,784.00

47,132.28

28,984.80

01-027-6166 SLIK BOX 215-15-200

01-027-6162 PYROSEAL REG MUD COMPOUND

01-027-6185 EBDNY MIDDING COMPOUND

01027 **

GROUP TOTAL

1,072.00

.00

643.50

11,391.90

01-033-6450 CORE COMPOUND - NO. 1

01033 **

GROUP TOTAL

3,873.82

1,869.04

32,456.45

17,769.44

01 **

TRANSACTION TOTAL

10,812.92

9,083.04

160,908.94

87,692.56

02-000-2627 BAGGING WESTERN BENTONITE

02-000-3068 MISC. DIRECT SHIP-ELECTRO

.00

.00

.00

.00

12/31/74
1980 YEAR-TO-DATE
1980 YEAR-TO-DATE
1980 YEAR-TO-DATE

CUSTOMER NO. CUSTOMER NAME PRODUCT CODE PRODUCT DESCRIPTION THIS YEAR LAST YEAR THIS YEAR LAST YEAR

03-000-3357	40 ALBANY SAND	.00	.00	298.00	252.00
03-000-3644	DOH CORNING HV 480 440 LB	.00	.00	7,638.40	1,000.00
03-000-3751	7774 - #1 30FT BRUSH	.00	.00	35.52	.00
03-000-4301	2 GA. INJECTOR MACHINE	.00	.00	.00	180.00
03-000-4303	V-56 DB-2100 115/60	.00	.00	.00	28.00
03-000-4304	156 2AG ARROW REGULATOR	.00	.00	.00	123.00
03-000-4305	2V8 SQUEEZIN SEWER STOPS	.00	.00	.00	10.00
03-000-4306	1 PC 1-1/4 FLEXIBLE HOSE	.00	.00	.00	10.00
03-000-5102	BAGGING WOOD FLOOR-PATON B	.00	.00	684.00	1,575.00
03000	GROUP TOTAL	35.52	.00	8,655.92	6,444.75
03-005-3451	REZBOND IN DRUMS	.00	.00	326.60	960.25
03-005-3482	EZ BOND SPECIAL IN DRUMS	2,452.50	.00	4,039.54	.00
03-005-3488	MARCO SET #400	.00	.00	603.75	.00
03-005-3872	ACTIVATOR NO. 3 IN DRUMS	.00	.00	408.75	.00
03-005-3884	EZ BOND 485 IN DRUMS	.00	.00	434.91	.00
03-005-3886	MAR CAM EZ BOND PREMIX 55	.00	.00	185.25	.00
03005	GROUP TOTAL	2,452.50	.00	5,998.80	960.25
03-007-3710	#300 LLS TERCOO CRUCIBLE	.00	.00	.00	258.52
03007	GROUP TOTAL	.00	.00	.00	258.52
03-008-3333	HGG KLEAN KAST-100	.00	.00	11,499.40	23,576.58
03008	GROUP TOTAL	.00	.00	11,499.40	23,576.58
03	TRANSACTION TOTAL	2,488.02	.00	26,154.12	31,240.10
05-000-0000	DIRECT SHIPMENT	262.15	2,481.30	40,116.71	45,492.01
05000	GROUP TOTAL	262.15	2,481.30	40,116.71	45,492.01
05-005-0000	DIRECT SHIPMENT-MARCAN	15,141.27	.00	152,129.60	109,526.52
05005	GROUP TOTAL	15,141.27	.00	152,129.60	109,526.52
05-006-0000	DIRECT SHIPMENT-KLEAN GAS	.00	.00	4,466.00	.00
05008	GROUP TOTAL	.00	.00	4,466.00	.00
05-010-0000	DIRECT SHIPMENT-ARCON COLLO	.00	2,377.50	49,950.50	43,920.75
05010	GROUP TOTAL	.00	2,377.50	49,950.50	43,920.75
05-015-0000	DIRECT SHIPMENT-BENNET & CL	.00	.00	.00	13.00
05015	GROUP TOTAL	.00	.00	.00	13.00
05	TRANSACTION TOTAL	15,403.42	4,858.80	246,662.81	198,940.28
07-000-2031	CONSIGNED STOCK-CHAPLETS	918.00	1,069.32	9,919.02	1,008.32
07000	GROUP TOTAL	918.00	1,069.32	9,919.02	1,008.32
07	TRANSACTION TOTAL	918.00	1,069.32	9,919.02	1,008.32

PRODUCT SALES BY CUSTOMER BY SALESMAN

FREEEDY 17 74 173

CUST. NO.	CUSTOMER NAME	TR GR CODE	PRODUCT DESCRIPTION	THIS YEAR	LAST YEAR	THIS MONTH	LAST MONTH	THIS YEAR TO DATE	LAST YEAR TO DATE
21-001-0018	PALEY-MILLMANSON	112-00	489.00	114.00	2,112.00	2,761.00			
21-001-0061	PALEY-MILLMANSON	119-00	469.00	174.00	3,112.00	2,761.00			
21001	GROUP TOTAL		119.00	84.00	1,329.00	372.00			
21-002-0018	PALEY-MILLMANSON	112-00	489.00	114.00	2,112.00	2,761.00			
21002	GROUP TOTAL		469.00	174.00	3,112.00	2,761.00			
21	TRANSACTION TOTAL		568.00	258.00	4,441.00	3,133.00			
****	CUSTOMER TOTAL		30,210.36	15,269.16	448,085.89	322,095.26			
*****	SALESMAN TOTAL		57,106.82	54,860.02	985,610.75	756,110.09			

12/31/76

THE HILL & GRIFFITH COMPANY
TOP 300 CUSTOMERS

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CUST NO.

CUSTOMER NAME

PRODUCT CODE

PRODUCT DESCRIPTION

PRODUCT SALES BY CUSTOMER BY SALESMAN

REPLY 17 1 41

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

07-000-2831 CONIGNED STOCK-CHAPLETS

07000

GROUP TOTAL

.00

.00

1,227.55

893.00

07 TRANSACTION TOTAL

.00

.00

1,227.55

893.00

21-001-0018 TYPE 18 PALLET-MILLANSON

21001

42 X 52 NON REVERSIBLE PA

.00

245.00

2,919.00

3,255.00

21-001-0021 PALLET

21001

42 X 52 NON REVERSIBLE PA

.00

.00

198.00

.00

21-001-0041 PALLET 48 X 48

21001

TYPE 48X48 PALLET

.00

119.00

72.00

126.00

21-001-0046 TYPE 48X48 PALLET

21001

48X42 DOUBLE FACE NON-REV

.00

.00

1,368.00

.00

21-001-0055 48X42 DOUBLE FACE NON-REV

21001

GROUP TOTAL

348.00

364.00

5,001.00

3,381.00

21-002-0018 TYPE 18 PALLET-MILLANSON

21002

GROUP TOTAL

.00

.00

.00

1,708.00

21 TRANSACTION TOTAL

21000

GROUP TOTAL

348.00

364.00

5,001.00

5,089.00

91-000-0000 FACTORY LOSS & DMGE MTRL

91000

GROUP TOTAL

.00

.00

.00

1,662.50

93-000-0000 MOUSE LOSS & DMGE MTRL

93000

GROUP TOTAL

.00

.00

.00

645.34

TRANSACTION TOTAL

93000

GROUP TOTAL

.00

.00

.00

645.34

TRANSACTION TOTAL

93000

GROUP TOTAL

.00

.00

.00

645.34

CUSTOMER TOTAL

93000

GROUP TOTAL

33,564.55

24,224.74

365,329.53

491,693.35

SALESMAN TOTAL

61,717.80

53,395.67

692,679.27

924,902.24

12/31/77

THE MILL & GRIFFITH COMPANY

REPORT NO. 98

TOP 300 CUSTOMERS

PRODUCT SALES BY CUSTOMER BY SALESMAN

READY

12/1977

1976

PAGE 02

CUSTOMER NO.

CUSTOMER NAME

PRODUCT CODE

PRODUCT DESCRIPTION

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

52600 TYER PIPE INDUSTRIES I

01-007-6058 100# BAGS NO. 1 EBONV COK

01007 **

GROUP TOTAL

.00

.00

01-013-6902 100# BAGS D-4 SEACOL-REG

01013 **

GROUP TOTAL

12,954.64

5,055.85

01-023-6159 E-2 DRY MDLD SPRAY

01023 **

GROUP TOTAL

2,698.80

2,496.00

01-027-6166 200# DRUM SLK BOX

01-027-6162 PYROSEAL MUDGING COMPOUND

01027 **

GROUP TOTAL

538.40

01-031-6651 100# BAGS D-4 ECONDCOAL

01031 **

GROUP TOTAL

1,709.10

1,709.10

01-053-6658 100#BAGS DUSTLESS #1 EBON

01053 **

GROUP TOTAL

.00

.00

02-001-0055 48X42 DOUBLE FACE NON REV

02001 **

GROUP TOTAL

1,014.00

1,014.00

TRANSACTION TOTAL

1,014.00

.00

1,014.00

.00

TOP 200 CUSTOMERS

CUSTOMER NAME

PRODUCT

THIS YEAR

LAST YEAR

03-000-2621 LOGG BAGS WESTERN BENJON
03-000-3644 DOM COATING H 490 440 LB
03-000-3742 HENCKEL-3133 RESIN 1 QLT G
03-000-3743 HENCKEL-3133 HARDENER 1/2 G
03000 *** GROUP TOTAL

.00 .00 .00 .00 .00
.00 .00 .00 .00 .00
.00 .00 .00 .00 .00
.00 .00 .00 .00 .00
11,101.60 7,324.70

03-005-3916 DRUM EZ BOND P50
03005 *** GROUP TOTAL
03-008-3333 HCG KLEAN KAST-100
03008 *** GROUP TOTAL

.00 .00 .00 .00 .00
.00 .00 .00 .00 .00
.00 .00 .00 .00 .00
.00 .00 .00 .00 .00
11,101.60 7,324.70

05-000-0000 DIRECT SHIPMENT
05000 *** GROUP TOTAL

2,529.86 2,831.90 43,977.27 22,803.71
2,529.86 2,831.90 43,977.27 22,803.71

05-005-0000 DIRECT SHIPMENT-MARCAN
05005 *** GROUP TOTAL

.00 16,893.00 42,288.20 130,323.24
16,893.00 42,288.20 130,323.24

05-010-0000 DIRECT SHIPMENT-AMCAN COLEO
05010 *** GROUP TOTAL

7,197.87 4,600.00 46,909.65 63,627.58
7,197.87 4,600.00 46,909.65 63,627.58

05-040-0000 DIRECT SHIPMENT-FEDERAL O
05040 *** GROUP TOTAL

.00 .00 .00 .00
.00 .00 .00 .00

05 TRANSACTION TOTAL

9,127.73 24,324.90 133,175.32 216,896.53

07-000-2831 CONSIGNED STOCK-CHAPLETS
07000 *** GROUP TOTAL

.00 .00 .00 .00
.00 .00 .00 .00

07 TRANSACTION TOTAL

.00 .00 .00 .00

21-001-0018 PALLET
21-001-0019 42 X 52 NON REVERSIBLE PA
21-001-0021 PALLET
21-001-0041 PALLET
21-001-0046 TYPE 46 PALLETS
21-001-0055 48X42 DOUBLE FACE NON REV
21001 *** GROUP TOTAL

.00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00
348.00 5,592.00 5,001.00
348.00 5,592.00 5,001.00

21 TRANSACTION TOTAL

.00 348.00 5,592.00 5,001.00

*** CUSTOMER TOTAL

29,547.47 33,564.55 312,450.79 365,329.53

*** SALES TOTAL

70,744.71 61,787.24 769,623.54 704,973.67

12/31/79

THE HILL & GRIFFITH COMPANY
REPORT NO. 98
TOP 300 CUSTOMERS

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178

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NO.

CUSTOMER NAME

IN GP CODE

PRODUCT DESCRIPTION

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

03-000-2621 1000 BAGS WESTERN BENTON

.00

.00

11,422.99

.00

03-000-3444 DOM CONNING NY 470 440 LB

.00

.00

13,650.00

4,724.00

03-000-3787 HEXCEL URALITE RESIN 9430

.00

.00

3,994.30

.00

03-000-5102 504 BAGS HLG HARDWOOD FLO

.00

.00

20,000.09

4,224.00

03-000-3913 ACTIVATOR 64

.00

.00

.00

.00

03-000-3992 E Z BOND T

.00

.00

.00

.00

03-000-0000 DIRECT SHIPMENT

.00

.00

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05-000-0000 DIRECT SHIPMENT- MARCAN

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05-000-0000 DIRECT SHIPMENT- ANER CO

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05-000-0000 DIRECT SHIPMENT- FEDERAL

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05-000-0000 DIRECT SHIPMENT- PALLET

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05-000-0000 DIRECT SHIPMENT- GROUP TOTAL

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05-000-0000 DIRECT SHIPMENT- GROUP TOTAL

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05-000-0000 DIRECT SHIPMENT- GROUP TOTAL

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05-000-0000 DIRECT SHIPMENT- GROUP TOTAL

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05-000-0000 DIRECT SHIPMENT- GROUP TOTAL

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12/31/01

THE HILL & GRIFFITH COMPANY

REPORT NO. 98

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PRODUCT SALES BY CUSTOMER BY SALESMAN

NEEDY

TOP 200 CUSTOMERS

NO.	CUSTOMER NAME	TR CP CODE	PRODUCT DESCRIPTION	THIS YEAR	LAST YEAR	THIS YEAR	LAST YEAR
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52800 TYLER PIPE INDUSTRIES

01-013-6902	N-4 SEACONAL 100% BAGS			4,795.20	8,918.75	107,836.77	86,727.87
01013	GROUP TOTAL			4,795.20	8,918.75	107,836.77	86,727.87
01-015-6109	BAGS CHARCOAL			.00	.00	.00	1,029.00
01015	GROUP TOTAL			.00	.00	.00	1,029.00
01-023-6159	E-2 DRY MOLD SPRAY-GRAP P			.00	.00	128,395.80	111,571.20
01023	GROUP TOTAL			.00	.00	128,395.80	111,571.20
01-027-6166	SLIK-BOX DRUMS			.00	.00	12,433.00	10,672.00
01-027-6182	PYROSEAL MUDGING COMPOUND			.00	.00	6,169.80	3,868.80
01027	GROUP TOTAL			.00	.00	18,602.80	14,540.80
01-053-6458	PI EBONY-CORE COMPOUSTLE			.00	.00	11,336.11	28,283.78
01053	GROUP TOTAL			.00	.00	11,336.11	28,283.78

12/31/81

THE HILL & GRIFFITH COMPANY

REPORT NO. 90

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FOR 388 CUSTOMERS
PRODUCT SALES BY CUSTOMER

SALESMAN

NO.

CUSTOMER NAME

TR GP CODE

PRODUCT DESCRIPTION

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

01-059-6803 FLYER PIPE BAG PRESENT

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

01059-0000 GROUP TOTAL

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

01-000-0000 TRANSACTION TOTAL

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

02-001-0004 PALLET & PALLETIZING

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

02-001-0004 PALLET & PALLETIZING

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

02-001-0004 PALLET & PALLETIZING

THIS YEAR

LAST YEAR

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02-001-0004 PALLET & PALLETIZING

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02-001-0004 PALLET & PALLETIZING

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02-001-0004 PALLET & PALLETIZING

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02-001-0004 PALLET & PALLETIZING

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02-001-0004 PALLET & PALLETIZING

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LAST YEAR

02-001-0004 PALLET & PALLETIZING

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

12/31/82

THE HILL & GRIFFITH COMPANY

REPORT NO. 98

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PRODUCT SALES BY CUSTOMER BY SALESMAN

REVENUE

17 1982

1981

CUST.

NO.

CUSTOMER NAME

TR. GP. CODE

PRODUCT DESCRIPTION

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

52800-TYLER PIPE INDUSTRIES

01-007-6050 #1 EBONY CORE COMPOUND 10

01007 ** GROUP TOTAL

.00

.00

.00

392.05

.00

01-013-6902 C-4 SEACOAL 100# BAGS

01013 ** GROUP TOTAL

11,683.30

4,795.20

.00

160,255.62

101,836.77

01-023-6159 F-7 DRY MOLD SPRAY-GRAP P

01023 ** GROUP TOTAL

.00

.00

.00

23,491.00

128,395.80

01-027-6166 SLIK BOW

01027 ** GROUP TOTAL

1,644.50

.00

.00

13,251.20

12,431.00

01-027-6182 PYROSEAL MUDGING COMPOUND

01027 ** GROUP TOTAL

.00

.00

.00

1,430.80

6,169.80

01-053-6450 #1 EBONY CORE COMP DUSTLE

01053 ** GROUP TOTAL

.00

.00

.00

.00

11,536.11

01-059-6803 TYLER PIPE BAG PRETIX

01059 ** GROUP TOTAL

.00

.00

.00

.00

63,845.14

01 ** TRANSACTION TOTAL

13,327.80

4,795.20

198,840.67

320,214.62

02-001-0009 TYPE 2 PALLETS

02001-0020 PALLETS 42 X 42

02001-0021 PALLETS 42 X 42

02-001-0040 PALLETS 40 X 48

02-001-0041 PALLETS 48 X 48

02-001-0042 PALLET & PALLETIZING

02-001-0055 PALLETS 42 X 48

02001 ** GROUP TOTAL

.00

.00

.00

288.00

9,856.00

02 ** TRANSACTION TOTAL

720.00

288.00

.00

9,856.00

03-000-3644 DC-HV490 EMULSION-DRUM

03000 ** GROUP TOTAL

.00

.00

.00

9,310.40

7,546.00

03 ** TRANSACTION TOTAL

.00

.00

.00

9,310.40

7,546.00

05-000-0000 DIRECT SHIPMENT

05000 ** GROUP TOTAL

7,548.00

7,753.26

.00

63,616.50

87,313.87

05-010-0000 DIRECT SHIPMENT-AMCN COLLOR

05010 ** GROUP TOTAL

.00

.00

.00

2,230.00

32,274.50

05-040-0000 DIRECT SHIPMENT-FEDERAL CO

05040 ** GROUP TOTAL

.00

.00

.00

6,641.25

51,455.60

05 ** TRANSACTION TOTAL

7,548.00

16,624.51

.00

117,302.10

230,186.57

05 ** TRANSACTION TOTAL

21,595.80

24,707.71

335,109.17

577,974.19

12/31/83

THE HALL & GILFILLAN COMPANY
REPORTING
TOP 300 CUSTOMERS

1982

PAGE 53

NO. CUSTOMER NAME TA CP CODE PRODUCT DESCRIPTION THIS YEAR LAST YEAR THIS YEAR LAST YEAR

52800 TYLER PIPE INDUSTRIES
01-007-6058 EBONY CORE COMPOUND NO. 1
01007 ** 1.00 .00 .00 827.16 392.05

01-013-6902 SEACOL D-4 1000 BAGS
01013 ** 4,633.36 11,683.30 152,482.44 160,255.62
GROUP TOTAL 4,633.36 11,683.30 152,482.44 160,255.62

01-023-6140 ECONOCOLAT 5200 CRUMBS
01023 ** 1.00 .00 .00 21,113.40 23,491.00
GROUP TOTAL 1.00 .00 .00 21,113.40 23,491.00

01-027-6166 SLIK BOX 2600 DRAWS
01027 ** 1.00 1,544.50 7,693.40 13,251.20
GROUP TOTAL 1.00 1,544.50 7,693.40 13,251.20

01-027-6182 PYROSEAL MULDING COMP. 700
01027 ** 1.00 1,664.50 7,693.40 13,251.20
GROUP TOTAL 1.00 1,664.50 7,693.40 13,251.20

01-001-0009 PALLET & PALLETIZING
02-001-0020 PALLET 42 X 42
02-001-0031 PALLET & PALLETIZING
02-001-0040 PALLET & PALLETIZING
02001 ** 288.00 720.00 9,661.00 9,656.00
GROUP TOTAL 288.00 720.00 9,661.00 9,656.00

02-001-0020 PALLET 42 X 42
02-001-0031 PALLET & PALLETIZING
02-001-0040 PALLET & PALLETIZING
02001 ** 288.00 720.00 9,661.00 9,656.00
GROUP TOTAL 288.00 720.00 9,661.00 9,656.00

03-000-3644 EMULSION DC-HV 490/4,000
03000 ** 1.00 .00 .00 10,178.88 9,310.40
GROUP TOTAL 1.00 .00 .00 10,178.88 9,310.40

03-000-5102 HEGSHARHODJELUOR-5005BA
03000 ** 1.00 .00 .00 10,178.88 9,310.40
GROUP TOTAL 1.00 .00 .00 10,178.88 9,310.40

12/31/63

THE HILL & GRIFFITH COMPANY

REPORT NO. 96

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02

1/63

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NO. CUSTOMER NAME

TR GP CODE

PRODUCT DESCRIPTION

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

05-000-0000 DIRECT SHIPMENT

05000

GROUP TOTAL

.00

1,548.00

1,657.20

63,616.50

05-010-0000 DIRECT SHIPMENT-AMRCM COLLO

05010

.00

.00

.00

2,230.00

05-040-0000 DIRECT SHIPMENT-FEDERAL

05040

2,137.90

.00

1,668.50

58,455.60

05-130-0000 MILWAUKEE CHAPLET & MFG

05130

.00

.00

23,893.36

.00

05-140-0000 HOLLAND MFG. CORP.

05160

.00

.00

322.60

.00

05-000-0000 GROUP TOTAL

05

2,137.90

7,548.00

32,541.66

117,302.10

05-000-0000 CUSTOMER TOTAL

05

7,061.26

21,595.80

225,698.14

335,309.17

05-000-0000 SALESMAN TOTAL

05

15,748.26

30,155.24

377,437.52

433,679.88

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LAST, YEAR

027016

04-835-13
04-835-13

10547.00
10547.00
10547.00

7,893.60
-00

00-00

415,402-89

6-605-00
6-629-00

4-629-00

4,635.20
1,246.88
5,902.08

1045

171040Z

322-61

1
2
3
4
5

153,340A

• •

12/31/72

THE HILL & GRIFFITH COMPANY
REPORT NO. 98
TOP 300 CUSTOMERS
PRODUCT SALES BY CUSTOMER BY SALESMAN

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CUST. NO. CUSTOMER NAME

*PRODUCT**
TR GP CODE

PRODUCT DESCRIPTION

***** THIS MONTH *****
THIS YEAR LAST YEAR***** YEAR-TO-DATE *****
THIS YEAR LAST YEAR

REEDY LT

1	52800 TYLER PIPE INDUSTRIES I	01-07-6058 CORE COMP. - NO. 1 EBONY	11,386.46	8,846.94
2		01 07 **	11,386.46	8,846.94
3		GROUP TOTAL		
4		01-09-6635 CORE PASTE - RED CHIEF	2,182.75	1,489.91
5		01 09 **	2,182.75	1,489.91
6		GROUP TOTAL		
7		01-13-6902 SEA COAL NO. D4 - REG	2,088.46	13,944.89
8		01 13 **	2,088.46	13,944.89
9		GROUP TOTAL		
10		01-23-6159 E - 2 DRY MOLD SPRAY	2,298.40	24,294.71
11		01 23 **	2,298.40	24,294.71
12		GROUP TOTAL		
13		01-27-6166 SLIK BOX 215-15-200	780.00	11,129.74
14		01 27 **	780.00	11,129.74
15		GROUP TOTAL		
16		01-27-6182 PYROSEAL REG MUD COMPOUND	585.00	7,120.41
17		01 27 **	585.00	7,120.41
18		GROUP TOTAL		
19		01-53-6458 CORE COMPOUND - NO. 1	1,083.50	2,654.58
20		01 53 **	1,083.50	2,654.58
21		GROUP TOTAL		
22		01-00-2627 H & G WESTERN BENTONITE	1,944.81	1,090.00
23		01 00 **	1,944.81	1,090.00
24		GROUP TOTAL		
25		03-00-3165 PURITE	551.25	160.00
26		03 00 **	551.25	160.00
27		GROUP TOTAL		
28		03-00-3536 MOROC CORE PASTE WHITE	2,509.39	196.05
29		03 00 **	2,509.39	196.05
30		GROUP TOTAL		
31		03-05-3451 REZ BOND	80.50	1,090.00
32		03 05 **	80.50	1,090.00
33		GROUP TOTAL		
34		03-05-3482 E Z BOND SPECIAL IN DRUMS	565.44	1,090.00
35		03 05 **	565.44	1,090.00
36		GROUP TOTAL		
37		03-05-3867 MAR CAN EZ BOND 50-1P IN	645.94	1,090.00
38		03 05 **	645.94	1,090.00
39		GROUP TOTAL		
40		01-00-2627 H & G WESTERN BENTONITE	1,944.81	1,090.00
41		01 00 **	1,944.81	1,090.00
42		GROUP TOTAL		
43		03-00-3165 PURITE	551.25	160.00
44		03 00 **	551.25	160.00
45		GROUP TOTAL		
46		03-00-3536 MOROC CORE PASTE WHITE	2,509.39	196.05
47		03 00 **	2,509.39	196.05
48		GROUP TOTAL		
49		03-05-3451 REZ BOND	80.50	1,090.00
50		03 05 **	80.50	1,090.00
51		GROUP TOTAL		
52		03-05-3482 E Z BOND SPECIAL IN DRUMS	565.44	1,090.00
53		03 05 **	565.44	1,090.00
54		GROUP TOTAL		
55		03-05-3867 MAR CAN EZ BOND 50-1P IN	645.94	1,090.00
56		03 05 **	645.94	1,090.00
57		GROUP TOTAL		

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REPORT NO. 38
TOP 100 CUSTOMERS

PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY 17

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CUST NO.	CUSTOMER NAME	PRODUCT	DESCRIPTION	THIS YEAR	LAST YEAR	THIS YEAR	LAST YEAR
1	NO.	TR GP CODE	PRODUCT DESCRIPTION	***** THIS MONTH *****	***** YEAR-TO-DATE *****		
2							
3							
4							
5		03-08-3333	H&B KLEAN KAST-100	1,666.50	1,666.50		
6		03 08 **	GROUP TOTAL	1,666.50	1,666.50		
7							
8		03 ***	TRANSACTION TOTAL	1,666.50	1,666.50		
9							
10		05-00-0000	DIRECT SHIPMENT	826.13	1,700.00	29,718.88	68,710.46
11		05 00 **	GROUP TOTAL	826.13	1,700.00	29,718.88	68,710.46
12							
13		05-05-0000	DIRECT SHIPMENT-MARCAM	6,482.10	6,890.05	87,717.45	46,873.26
14		05 05 **	GROUP TOTAL	6,482.10	6,890.05	87,717.45	46,873.26
15							
16		05-07-0000	DIRECT SHIPMENT-ELECTRO				
17		05 07 **	GROUP TOTAL				
18							
19		05-10-0000	DIRECT SHIPMENT	3,750.00	40,268.75		
20		05 10 **	GROUP TOTAL	3,750.00	40,268.75		
21							
22		05-15-0000	DIRECT SHIPMENT				
23		05 15 **	GROUP TOTAL				
24							
25		05 ***	TRANSACTION TOTAL	11,058.23	8,590.05	156,680.08	115,083.72
26							
27		21-01-0018	PALLETS				
28		21-01-0041	PALLETS				
29		21 01 **	GROUP TOTAL				
30							
31		21-02-0004	PALLETS				
32		21-02-0018	PALLETS				
33		21-02-0041	PALLETS				
34		21 02 **	GROUP TOTAL				
35							
36		21 ***	TRANSACTION TOTAL	265.00	2,145.00	195.00	
37							
38		91-00-0000	LOST & DAMAGED GOODS				
39		91 00 **	GROUP TOTAL				
40							
41		91 ***	TRANSACTION TOTAL				
42							
43		****	CUSTOMER TOTAL	19,428.09	9,939.45	238,360.45	154,549.61
44							
45		****	SALESMAN TOTAL	51,659.89	26,010.38	570,405.71	400,925.00
46							
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							

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REPORT NO. 98
TOP 300 CUSTOMERS
PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY 17

CUST. NO.	CUSTOMER NAME	TR. GP CODE	PRODUCT DESCRIPTION	THIS YEAR	LAST YEAR	THIS YEAR TO DATE	LAST YEAR
52800	TYLER PIPE INDUSTRIES I						
			01-009-6635 CORE PASTE - RED CHIEF	1974 220.50	1973 2,001.10	1974 2,582.25	1973 2,582.25
			01009 ** GROUP TOTAL	.00	220.50	2,001.10	2,582.25
			01-013-6902 SEA COAL NO D4 - REG	5,867.10	1,566.00	50,203.95	19,188.37
			01013 ** GROUP TOTAL	5,867.10	1,566.00	50,203.95	19,188.37
			01-015-6109 CHARBO H - CRUDE FURAC	.00	.00	2,709.88	.00
			01015 ** GROUP TOTAL	.00	.00	2,709.88	.00
			01-021-6912 PARTING SCOTCH LIQUID	.00	.00	665.50	222.20
			01021 ** GROUP TOTAL	.00	.00	665.50	222.20
			01-023-6159 E - Z DRY MOLD SPRAY	.00	4,784.00	47,132.28	28,984.80
			01023 ** GROUP TOTAL	.00	4,784.00	47,132.28	28,984.80
			01-027-6166 SLIK BOX 215-15-200	1,072.00	.00	14,106.00	11,867.00
			01-027-6182 PYROSEAL REG MUD COMPOUND	.00	643.50	11,391.90	7,078.50
			01-027-6185 EBGONV MUDDING COMPOUND	.00	.00	241.88	.00
			01027 ** GROUP TOTAL	1,072.00	643.50	25,739.78	18,945.50
			01-053-6458 CORE COMPOUND - NO. 1	3,873.82	1,869.04	32,456.45	17,769.44
			01053 ** GROUP TOTAL	3,873.82	1,869.04	32,456.45	17,769.44
			01 *** TRANSACTION TOTAL	10,812.92	9,083.04	160,908.94	87,692.56
			03-000-2627 BAGGING WESTERN BENTONITE	.00	.00	.00	3,462.75
			03-000-3086 MISC. DIRECT SHIP-ELECTRO	.00	.00	.00	915.00

REPORT NO. 98
TOP 300 CUSTOMERS
PRODUCT SALES BY CUSTOMER BY SALESMAN

REDDY 17

CUST. NO.	CUSTOMER NAME	PRODUCT**	TR GR CODE	PRODUCT DESCRIPTION	***** THIS MONTH *****				***** YEAR-TO-DATE *****			
					THIS YEAR	LAST YEAR	THIS YEAR	LAST YEAR	THIS YEAR	LAST YEAR	THIS YEAR	LAST YEAR
03-000-3357	#0 ALBANY SAND				.00	.00	298.00	252.00				
03-000-3644	DM CORNING HV 490 440 LB				.00	.00	7,638.40	.00				
03-000-3751	7774 - #1 SOFT BRUSH				35.52	.00	35.52	.00				
03-000-4301	2 GA. INJECTOR MACHINE				.00	.00	.00	180.00				
03-000-4303	V-56 DB 2100 115/60				.00	.00	.00	28.00				
03-000-4304	158 2AG ARROW REGULATOR				.00	.00	.00	12.00				
03-000-4305	2VB SQUEEZIN SEWER STOPS				.00	.00	.00	10.00				
03-000-4306	1 PC 1-1/4 FLEXIBLE HOSE				.00	.00	.00	10.00				
03-000-5102	BAGGING WOOD FLOUR FROM B				.00	.00	684.00	1,535.00				
03000	**			GROUP TOTAL	35.52	.00	8,655.92	6,444.75				
03-005-3451	REZBOND IN DRUMS				.00	.00	326.60	960.25				
03-005-3482	EZ BOND SPECIAL IN DRUMS				2,452.50	.00	4,039.54	.00				
03-005-3488	MARCO SET #400				.00	.00	603.75	.00				
03-005-3872	ACTIVATOR NO. 3 IN DRUMS				.00	.00	408.75	.00				
03-005-3884	EZ BOND 485 IN DRUMS				.00	.00	434.91	.00				
03-005-3886	MAR CAM EZ BOND PREMIX 55				.00	.00	185.25	.00				
03005	**			GROUP TOTAL	2,452.50	.00	5,998.80	960.25				
03-007-3710	#300 LLS TERCOD CRUCIBLE				.00	.00	.00	258.52				
03007	**			GROUP TOTAL	.00	.00	.00	258.52				
03-008-3333	H6G KLEAN KAST-100				.00	.00	11,499.40	23,576.58				
03008	**			GROUP TOTAL	.00	.00	11,499.40	23,576.58				
03	***			TRANSACTION TOTAL	2,488.02	.00	26,154.12	31,240.10				
05-000-0000	DIRECT SHIPMENT				262.15	2,481.30	40,116.71	45,492.01				
05000	**			GROUP TOTAL	262.15	2,481.30	40,116.71	45,492.01				
05-005-0000	DIRECT SHIPMENT-MARCAM				15,141.27	.00	152,129.60	109,526.52				
05005	**			GROUP TOTAL	15,141.27	.00	152,129.60	109,526.52				
05-008-0000	DIRECT SHIPMENT-KLEAN GAS				.00	.00	4,466.00	.00				
05008	**			GROUP TOTAL	.00	.00	4,466.00	.00				
05-010-0000	DIRECT SHIPMENT-AMRCN COLLO				.00	2,377.50	49,980.50	43,928.75				
05010	**			GROUP TOTAL	.00	2,377.50	49,980.50	43,928.75				
05-015-0000	DIRECT SHIPMENT-BENNETT & CL				.00	.00	.00	13.00				
05015	**			GROUP TOTAL	.00	.00	.00	13.00				
05	***			TRANSACTION TOTAL	15,403.42	4,858.80	246,662.81	198,960.28				
07-000-2831	CONSIGNED STOCK-CHAPLETS				918.00	1,069.32	9,919.02	1,069.32				
07000	**			GROUP TOTAL	918.00	1,069.32	9,919.02	1,069.32				
07	***			TRANSACTION TOTAL	918.00	1,069.32	9,919.02	1,069.32				

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TOP 300 CUSTOMERS

PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY 17

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CUST.

CUSTOMER NAME

*PRODUCT**
IR GP CODE

PRODUCT DESCRIPTION

***** THIS MONTH *****

THIS YEAR

LAST YEAR

***** YEAR-TO-DATE *****

LAST YEAR

21-001-0018 TYPE 18 PALLET-WILLIAMSON

112.00

84.00

1,322.00

372.00

21-001-0041 PALLET 48 X 48

7.00

.00

7.00

.00

21001 ** GROUP TOTAL

119.00

84.00

1,329.00

372.00

21-002-0018 TYPE 18 PALLET-WILLIAMSON

469.00

174.00

3,112.00

2,761.00

21002 ** GROUP TOTAL

469.00

174.00

3,112.00

2,761.00

21 *** TRANSACTION TOTAL

588.00

258.00

4,441.00

3,133.00

**** CUSTOMER TOTAL

30,210.36

15,269.16

448,085.69

322,095.26

***** SALESMAN TOTAL

57,106.82

54,860.02

985,610.75

756,110.09

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TOP 300 CUSTOMERS

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PRODUCT SALES BY CUSTOMER BY SALESMAN

VACANT-TERT

CUST. NO. CUSTOMER NAME TR OF CODE PRODUCT DESCRIPTION

***** THIS MONTH ***** YEAR-TO-DATE ***** THIS YEAR LAST YEAR

52800 TYLER PIPE INDUSTRIES

01-003-6052 EBONY CORE COMPOUND 41 10 7,995.14 827.19

01-003-6052 EBONY CORE COMPOUND 41 10 7,995.14 827.19

01-013-6902 SEACOL D-4 100# BAGS 112,127.78 104,835.13

01-023-6140 EGONOCGAT 520# DRUMS 6,528.88 1,847.00

01-023-6159 EL DRY PLASTIC MOLD SPAY 19,806.00 1,847.00

01-027-6166 SLIK BOX 260# DRUMS 7,564.70 7,893.60

01-027-6182 PYROSEAL MUDDING COMP 700 8,460.70 7,893.60

01-051-6713 SEACOL D-4 DUSTLESS 50# 2,173.05 1,847.00

01-051-6713 SEACOL D-4 DUSTLESS 50# 2,173.05 1,847.00

01-001-0009 PALLET & PALLETIZING 40.00 16.00

02-001-0040 PALLET & PALLETIZING 6,944.00 6,605.00

02-001-0040 PALLET & PALLETIZING 6,944.00 6,605.00

02-001-0040 PALLET & PALLETIZING 6,944.00 6,605.00

02-001-0040 PALLET & PALLETIZING 6,944.00 6,605.00

02-001-0040 PALLET & PALLETIZING 6,944.00 6,605.00

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TOP 300 CUSTOMERS

PRODUCT SALES BY CUSTOMER BY SALESMAN

VACANT-TERIT

CUSTOMER NO.

CUSTOMER NAME

PRODUCT CODE

PRODUCT DESCRIPTION

THIS MONTH

LAST YEAR

THIS YEAR

LAST YEAR

52800 TYLER PIPE INDUSTRIES

01-007-6058 EBONY CORE COMPOUND NO. 1
01007 ** GROUP TOTAL

1983 1982 1983 1982
00 00 00 00
827.15 827.15 392.05 392.05

01-013-6902 SEACAL D-4 100# BAGS
01013 ** GROUP TOTAL

4635.36 11683.30 152482.44 160255.62

01-023-6140 ECONOCOAT 520# DRUMS
01-023-6159 EZ DRY PLASTIC MOLD SPRAY
01023 ** GROUP TOTAL

00 00 00 00
00 00 11113.40 23491.00

01-027-6166 SLIK BOX 260# DRUMS
01-027-6182 PYROSEAL MIDDING COMP 700#
01027 ** GROUP TOTAL

00 00 00 00
1644.50 7893.60 13251.20 13450.80

01-027-6182 PYROSEAL MIDDING COMP 700#
01027 ** GROUP TOTAL

00 00 00 00
1644.50 7893.60 13251.20 13450.80

01-027-6182 PYROSEAL MIDDING COMP 700#
01027 ** GROUP TOTAL

00 00 00 00
1644.50 7893.60 13251.20 13450.80

01-027-6182 PYROSEAL MIDDING COMP 700#
01027 ** GROUP TOTAL

00 00 00 00
1644.50 7893.60 13251.20 13450.80

02-001-0009 PALLET & PALLETIZING
02-001-0020 PALLET & PALLETIZING
02-001-0031 PALLET & PALLETIZING
02-001-0040 PALLET & PALLETIZING
02001 ** GROUP TOTAL

4635.36 13327.80 172316.60 198840.67

02-001-0009 PALLET & PALLETIZING
02-001-0020 PALLET & PALLETIZING
02-001-0031 PALLET & PALLETIZING
02-001-0040 PALLET & PALLETIZING
02001 ** GROUP TOTAL

00 00 00 00
00 00 00 00

02-001-0009 PALLET & PALLETIZING
02-001-0020 PALLET & PALLETIZING
02-001-0031 PALLET & PALLETIZING
02-001-0040 PALLET & PALLETIZING
02001 ** GROUP TOTAL

00 00 00 00
00 00 00 00

02-001-0009 PALLET & PALLETIZING
02-001-0020 PALLET & PALLETIZING
02-001-0031 PALLET & PALLETIZING
02-001-0040 PALLET & PALLETIZING
02001 ** GROUP TOTAL

00 00 00 00
00 00 00 00

02-001-0009 PALLET & PALLETIZING
02-001-0020 PALLET & PALLETIZING
02-001-0031 PALLET & PALLETIZING
02-001-0040 PALLET & PALLETIZING
02001 ** GROUP TOTAL

00 00 00 00
00 00 00 00

02-001-0009 PALLET & PALLETIZING
02-001-0020 PALLET & PALLETIZING
02-001-0031 PALLET & PALLETIZING
02-001-0040 PALLET & PALLETIZING
02001 ** GROUP TOTAL

00 00 00 00
00 00 00 00

02-001-0009 PALLET & PALLETIZING
02-001-0020 PALLET & PALLETIZING
02-001-0031 PALLET & PALLETIZING
02-001-0040 PALLET & PALLETIZING
02001 ** GROUP TOTAL

00 00 00 00
00 00 00 00

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TOP 100 CUSTOMERS

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PRODUCT SALES BY CUSTOMER BY SALESMAN

VOLUME/REVENUE

CUST.

CUSTOMER NAME

TR GP CODE

PRODUCT DESCRIPTION

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

05-000-0000 DIRECT SHIPMENT

05000 **

GROUP TOTAL

.00

7,548.00

1,657.20

63,616.50

05-010-0000 DIRECT SHIPMENT-AMRCN. COULD

05010 **

GROUP TOTAL

.00

1,657.20

63,616.50

05-040-0000 DIRECT SHIPMENT-FEDERAL O

05040 **

GROUP TOTAL

2,137.90

.00

7,668.50

51,455.60

05-130-0000 MILWAUKEE CHARLETT & MEG.

05130 **

GROUP TOTAL

.00

.00

23,893.36

.00

05-160-0000 HOLLAND MEG. CORP.

05160 **

GROUP TOTAL

.00

.00

322.60

.00

05 TRANSACTION TOTAL

CUSTOMER TOTAL

2,137.90

7,548.00

33,541.66

117,302.10

**** SALESMAN TOTAL

CUSTOMER TOTAL

7,4061.26

21,595.80

225,698.14

335,309.17

***** SALESMAN TOTAL

CUSTOMER TOTAL

15,748.26

30,155.24

377,437.51

633,679.88

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PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY 17

1982

1981

CUST. NO. CUSTOMER NAME TRIG CODE PRODUCT DESCRIPTION ***** THIS MONTH ***** YEAR-TO-DATE ***** THIS YEAR LAST YEAR

52800 TYLER PIPE INDUSTRIES

01-001-6058 #1 EBONY CORE COMPOUND 10

.00 .00 .00 392.05 .00

01007 ** GROUP TOTAL

.00 .00 .00 392.05 .00

01-013-6902 D-4 SEAFOAL 100# BAGS

11,683.30 4,795.20 160,255.62 107,836.77

01013 ** GROUP TOTAL

11,683.30 4,795.20 160,255.62 107,836.77

01-023-6159 F-7 DRY MOLD SPRAY-GRAP P

.00 .00 .00 23,491.00 128,395.80

01023 ** GROUP TOTAL

.00 .00 .00 23,491.00 128,395.80

01-027-6166 STIK BOX

1,644.50 .00 .00 13,251.20 12,431.00

01-027-6182 PYROSEAL MUDDING COMPOUND

.00 .00 .00 1,456.80 6,169.80

01027 ** GROUP TOTAL

1,644.50 .00 .00 14,708.00 18,600.80

01-053-6458 #1 EBONY CORE COMP DUSTIE

.00 .00 .00 .00 11,536.11

01053 ** GROUP TOTAL

.00 .00 .00 .00 11,536.11

01-059-6803 TYLER PIPE BAG PREMIX

.00 .00 .00 .00 63,845.14

01059 ** GROUP TOTAL

.00 .00 .00 .00 63,845.14

01 *** TRANSACTION TOTAL

13,327.80 4,795.20 198,840.67 130,214.62

02-001-0009 TYPE 9 PALLETS

.00 .00 .00 8.00 .00

02-001-0020 PALLETS 42 X 42

.00 .00 .00 32.00 .00

02-001-0021 PALLETS 42 X 42

.00 .00 .00 .00 30.00

02-001-0040 PALLETS 40 X 48

720.00 288.00 9,816.00 7,354.00

02-001-0041 PALLETS 46 X 48

.00 .00 .00 .00 16.00

02-001-0042 PALLET & PALLETIZING

.00 .00 .00 .00 2,584.00

02-001-0055 PALLETS 42 X 48

.00 .00 .00 .00 12.00

02001 ** GROUP TOTAL

720.00 288.00 9,856.00 9,996.00

02 *** TRANSACTION TOTAL

720.00 288.00 9,856.00 9,996.00

03-000-3644 DC-HV490 EMULSION-DRUM

.00 .00 .00 9,310.40 7,546.00

03000 ** GROUP TOTAL

.00 .00 .00 9,310.40 7,546.00

03 *** TRANSACTION TOTAL

.00 .00 .00 9,310.40 7,546.00

05-000-0000 DIRECT SHIPMENT

7,548.00 7,753.26 63,616.50 87,373.87

05000 ** GROUP TOTAL

7,548.00 7,753.26 63,616.50 87,373.87

05-010-0000 DIRECT SHIPMT-AMRCN COLLO

.00 .00 .00 2,230.00 32,274.50

05010 ** GROUP TOTAL

.00 .00 .00 2,230.00 32,274.50

05-040-0000 DIRECT SHIPMENT-FEDERAL B

.00 .00 .00 6,641.25 110,538.20

05040 ** GROUP TOTAL

.00 .00 .00 6,641.25 110,538.20

05 *** TRANSACTION TOTAL

7,548.00 16,624.51 117,302.10 230,186.57

05 *** TRANSACTION TOTAL

7,548.00 16,624.51 117,302.10 230,186.57

05 *** TRANSACTION TOTAL

7,548.00 16,624.51 117,302.10 230,186.57

05 *** TRANSACTION TOTAL

7,548.00 16,624.51 117,302.10 230,186.57

05 *** TRANSACTION TOTAL

7,548.00 16,624.51 117,302.10 230,186.57

05 *** TRANSACTION TOTAL

7,548.00 16,624.51 117,302.10 230,186.57

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TOP 300 CUSTOMERS
PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY 17

CUST.

NO.

CUSTOMER NAME

#PRODUCT**

IR GP CODE

PRODUCT DESCRIPTION

***** THIS MONTH *****

THIS YEAR

LAST YEAR

***** YEAR-TO-DATE *****

THIS YEAR

LAST YEAR

SALESMAN TOTAL

30,155,245.55,586.50

633,679.88 1,206,800.15

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TOP 300 CUSTOMERS

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CUST. NO.

CUSTOMER NAME

PRODUCT TR GP CODE

PRODUCT DESCRIPTION

REVENUE THIS MONTH

THIS YEAR

LAST YEAR

PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY

11

1980

52800 TYLER PIPE INDUSTRIES

01-013-6902	D-4 SEACOL 100# BAGS	4,795.20	8,918.75	101,836.77	86,727.81
01013	** GROUP TOTAL	4,795.20	8,918.75	101,836.77	86,727.81
01-015-6109	BAGS CHARBON H	.00	.00	.00	1,029.00
01015	** GROUP TOTAL	.00	.00	.00	1,029.00
01-023-6159	E-2 DRY MOLD SPRAY-GRAP P	.00	.00	128,395.80	111,571.20
01023	** GROUP TOTAL	.00	.00	128,395.80	111,571.20
01-027-6166	SLIK-BOX DRUMS	.00	.00	12,431.00	10,612.00
01-027-6182	PYROSEAL MUDGING COMPOUND	.00	.00	6,169.80	3,868.80
01027	** GROUP TOTAL	.00	.00	18,600.80	14,540.80
01-033-6458	CI EBDON CORE COMP MORTAR	.00	.00	11,536.11	28,283.78
01033	** GROUP TOTAL	.00	.00	11,536.11	28,283.78

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198-000 CUSTOMER

PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY

17

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CUST. NO.

CUSTOMER NAME

TR GP CODE

PRODUCT DESCRIPTION

THIS YEAR

LAST YEAR

THIS YEAR

LAST YEAR

01-059-0803 TYLER PIPE 500 PRETTY
01059 ** GROUP TOTAL

*00 *00

63184.14

63184.51

2,309.51

01 *** TRANSACTION TOTAL

4479.20

64918.75

3304214.62

244402.16

02-001-0004 PALLET 6 PALETTIZING

*00 *00

*00 *00

30.00

336.00

02-001-0021 PALLET 42 X 48

*00 *00

*00 *00

30.00

30.00

02-001-0040 PALLET 40 X 48

*00 *00

*00 *00

7,354.00

4,938.00

02-001-0041 PALLET 48 X 48

*00 *00

*00 *00

16.00

126.00

02-001-0042 PALLET 6 PALETTIZING

*00 *00

*00 *00

2,584.00

144.00

02-001-0055 PALLET 42 X 48

*00 *00

*00 *00

12.00

312.00

02001 ** GROUP TOTAL

288.00

516.00

9,996.00

5,886.00

02 *** TRANSACTION TOTAL

288.00

516.00

9,996.00

5,886.00

03-000-3644 DC-HV400 EMULSION-DRUM

*00 *00

*00 *00

7,546.00

8,624.00

03000 ** GROUP TOTAL

*00 *00

*00 *00

7,546.00

8,624.00

03-005-3681 EZ-BOND 225-DRUMS

*00 *00

*00 *00

*00 *00

2,067.00

03-005-3915 ACTIVATOR 100-DRUM

*00 *00

*00 *00

*00 *00

837.00

03-005-3981 55 GAL DR. ACTIVATOR 100

*00 *00

*00 *00

*00 *00

420.00

03-005-3984 EZ-BOND 410-543-18-DRUM

*00 *00

*00 *00

*00 *00

1,167.88

03005 ** GROUP TOTAL

*00 *00

*00 *00

*00 *00

4,491.88

03 *** TRANSACTION TOTAL

*00 *00

*00 *00

7,546.00

13,115.88

05-000-0000 DIRECT SHIPMENT

7,753.26

2,932.46

87,373.87

47,892.05

05000 ** GROUP TOTAL

7,753.26

2,932.46

87,373.87

47,892.05

05-010-0000 DIRECT SHIPMENT- AMER COL

2,230.00

*00 *00

32,274.50

79,643.00

05010 ** GROUP TOTAL

2,230.00

*00 *00

32,274.50

79,643.00

05-040-0000 DIRECT SHIPMENT- FEDERAL

6,641.25

8,576.50

110,538.20

22,622.50

05040 ** GROUP TOTAL

6,641.25

8,576.50

110,538.20

22,622.50

05 *** TRANSACTION TOTAL

16,624.51

11,508.96

230,186.57

150,157.55

*** CUSTOMER TOTAL

21,707.71

20,943.71

577,943.19

413,621.59

***** SALESMAN TOTAL

55,586.50

80,227.95

1,206,800.15

922,581.37

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THE HILL'S GRIFFITH COMPANY

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TOP 300 CUSTOMERS

PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY

17

1977

1976

PAGE 82

CUST
NO.

CUSTOMER NAME

*PRODUCT**
TR 5P CODE

PRODUCT DESCRIPTION

***** THIS MONTH *****
THIS YEAR LAST YEAR***** YEAR-TO-DATE *****
THIS YEAR LAST YEAR

52800 TYLER PIPE INDUSTRIES I

01-007-6058 100# BAGS NO. 1 EBONY COR
01007 ** GROUP TOTAL

.00

.00

.00

8,069.89

01-013-6902 100# BAGS D-4 SEACOL-REG
01013 ** GROUP TOTAL

12,954.64

5,055.85

77,572.60

62,220.32

01-023-6159 E-Z DRY MOLD SPRAY
01023 ** GROUP TOTAL

2,698.80

2,496.00

37,493.40

27,264.80

01-027-6166 200# DRUM SLIK BOX
01-027-6182 PYROSEAL MIDDING COMPOUND
01027 ** GROUP TOTAL

538.40

1,339.80

9,148.00

8,308.00

01-051-6451 100# BAGS D4 ECONOCOAL
01051 ** GROUP TOTAL

1,709.10

.00

15,019.57

.00

01-053-6458 100#BAGS DUSTLESS #1 EBON
01053 ** GROUP TOTAL

.00

.00

15,774.50

11,762.99

01-053-6458 100#BAGS DUSTLESS #1 EBON
01053 ** GROUP TOTAL

18,805.74

8,891.65

161,567.87

123,679.75

02-001-0055 48X42 DOUBLE FACE NON REV
02001 ** GROUP TOTAL

1,014.00

.00

1,014.00

.00

02-001-0055 48X42 DOUBLE FACE NON REV
02001 ** GROUP TOTAL

1,014.00

.00

1,014.00

.00

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THE HILL & GRIFFITH COMPANY
REPORT NO. 98
TOP 300 CUSTOMERS

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PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY 17

CUSTOMER NAME	PRODUCT CODE	PRODUCT DESCRIPTION	THIS YEAR	LAST YEAR	THIS YEAR-TO-DATE	LAST YEAR
03-000-2627	100# BAGS WESTERN BENTONITE		.00	.00	.00	1,551.90
03-000-3644	DDM CORNING HV.490 440 LB		.00	.00	10,859.20	5,772.80
03-000-3742	HEXCEL-3133 RESIN 1 QF. C		.00	.00	242.40	.00
03-000-3743	HEXCEL-3133 HARDENER 1/2		.00	.00	.00	.00
03000	GROUP TOTAL		.00	.00	11,101.60	7,324.70
03-005-3916	DRUM EZ BOND P50		.00	.00	.00	1,045.00
03005	GROUP TOTAL		.00	.00	.00	1,045.00
03-008-3333	HEG KLEAN KAST-100		.00	.00	.00	10,155.00
03008	GROUP TOTAL		.00	.00	.00	10,155.00
03	TRANSACTION TOTAL		.00	.00	11,101.60	18,524.70
05-000-0000	DIRECT SHIPMENT		2,529.86	2,831.90	43,977.27	22,803.71
05000	GROUP TOTAL		2,529.86	2,831.90	43,977.27	22,803.71
05-005-0000	DIRECT SHIPMENT-MARCAM		.00	16,893.00	42,288.20	130,323.24
05005	GROUP TOTAL		.00	16,893.00	42,288.20	130,323.24
05-010-0000	DIRECT SHIPMENT-AMCN COLLO		7,197.87	4,600.00	46,909.85	63,627.58
05010	GROUP TOTAL		7,197.87	4,600.00	46,909.85	63,627.58
05-040-0000	DIRECT SHIPMENT-FEDERAL D		.00	.00	.00	142.00
05040	GROUP TOTAL		.00	.00	.00	142.00
05	TRANSACTION TOTAL		9,727.73	24,324.90	133,175.32	216,896.53
07-000-2831	EDSIGNED STOCK-CHARPLETS		.00	.00	.00	1,227.55
07000	GROUP TOTAL		.00	.00	.00	1,227.55
07	TRANSACTION TOTAL		.00	.00	.00	1,227.55
21-001-0018	PALETTE		.00	.00	.00	2,919.00
21-001-0019	42 X 52 NON REVERSIBLE PA		.00	.00	.00	96.00
21-001-0021	PALETTE		.00	.00	.00	198.00
21-001-0041	PALETTE		.00	.00	.00	72.00
21-001-0046	TYPE 46 PALLETS		.00	.00	.00	348.00
21-001-0055	48X42 DOUBLE FACE NON REV		.00	348.00	5,556.00	1,368.00
21001	GROUP TOTAL		.00	348.00	5,556.00	5,001.00
21	TRANSACTION TOTAL		.00	348.00	5,556.00	5,001.00
****	CUSTOMER TOTAL		29,547.47	33,564.55	312,450.79	365,329.53
*****	SALESMAN TOTAL		70,744.71	61,167.24	769,623.54	704,973.67

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THE HILL & GRIFFITH COMPANY

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TOP 300 CUSTOMERS

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PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY 17

CUST. NO.

CUSTOMER NAME

*PRODUCT**
TR. GP. CODE

PRODUCT DESCRIPTION

***** THIS MONTH *****
THIS YEAR

LAST YEAR

***** YEAR-TO-DATE *****
THIS YEAR

LAST YEAR

52800 TYLER PIPE INDUSTRIES

01-007-6058 100# BAGS NO. 1 EBONY COR
01007 ** GROUP TOTAL

.00 .00 8,069.89 .00

01-009-6635 CORE PASTE - RED CHIEF
01009 ** GROUP TOTAL

.00 .00 .00 432.00

01-013-6901 100# BAGS C-3 SEACAL
01-013-6902 SEA COAL NO D4 - REG
01013 ** GROUP TOTAL.00 .00 .00 1,543.50
5,055.85 3,362.07 62,220.32 48,586.62
5,055.85 3,362.07 62,220.32 50,130.1201-015-6109 CHARBO W - CRUDE FURAG
01015 ** GROUP TOTAL

.00 .00 .00 .00

01-021-6912 PARTING SCOTCH LIQUID
01021 ** GROUP TOTAL

.00 .00 .00 .00

01-023-6159 E - 2 DRY MOLD SPRAY
01023 ** GROUP TOTAL2,496.00 4,732.00 27,264.80 32,237.40
2,496.00 4,732.00 27,264.80 32,237.4001-027-6166 SLIK BOX 215-15-200
01-027-6182 PYROSEAL REG MUD COMPOUND
01-027-6185 EBONY MUDGING COMPOUND
01027 ** GROUP TOTAL.00 1,584.00 8,308.00 12,036.00
1,339.80 .00 6,053.75 4,391.40
1,339.80 1,584.00 14,361.75 16,427.4001-051-6402 SEA COAL NO D4 - DUSTLESS
01051 ** GROUP TOTAL.00 .00 .00 1,378.13
.00 .00 .00 1,378.1301-053-6458 CORE COMPOUND - NO. 1
01053 ** GROUP TOTAL.00 3,907.00 11,762.99 36,675.47
.00 3,907.00 11,762.99 36,675.47

01 *** TRANSACTION TOTAL

8,891.65 13,585.07 123,679.75 137,280.52

03-000-2627 BAGGING WESTERN BENTONITE
03-000-3086 MISC. DIRECT SHIP-ELECTRO
03-000-3357 #0 ALBANY SAND.00 .00 .00 2,160.00
.00 .00 .00 .00
.00 .00 .00 .00

THE HILL & GRIFFITH COMPANY
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TOP 300 CUSTOMERS

PRODUCT SALES BY CUSTOMER BY SALESPERSON

DISORDER NAME

PRODUCT
TRGP CODE=**PRODUCT DESCRIPTION**

*** THIS MONTH ***
THIS YEAR LAST YEAR

YEAR-TO-DATE
THIS YEAR LAST YEAR

LAST YE

LINE	ITEM	QTY	UNIT	PRICE	AMOUNT	TAX	TOTAL
03-000-3644	DOW CORNING HV 490 440 LB	.00		.00	5,772.80	3,184.20	
03-000-3751	7774 - #1 SOFT BRUSH	.00		.00	.00	.00	
03-000-4301	2 GA. INJECTOR MACHINE	.00		.00	.00	.00	
03-000-4303	V-56 DB 2100 115/60	.00		.00	.00	.00	
03-000-4304	158 ZAG ARROW REGULATOR	.00		.00	.00	.00	
03-000-4305	2VB SQUEEZIN SEWER STOPS	.00		.00	.00	.00	
03-000-4306	1 PC 1-1/4 FLEXIBLE HOSE	.00		.00	.00	.00	
03-000-5102	BAGGING MOOD FLOUR FROM B	.00		.00	7,324.70	5,344.20	
03-000-5102	GROUP TOTAL	.00		.00	.00	.00	
03-005-3451	REZ BOND IN DRUMS	.00		.00	.00	.00	
03-005-3482	EZ BOND SPECIAL IN DRUMS	.00		.00	.00	.00	
03-005-3488	MARCO SET #400	.00		.00	.00	.00	
03-005-3857	SHURBAKE	.00		.00	.00	.00	
03-005-3872	ACTIVATOR NO. 3 IN DRUMS	.00		.00	.00	.00	
03-005-3873	DRUMS SHURBAKE A	.00		.00	.00	.00	
03-005-3886	EZ BOND 485 IN DRUMS	.00		.00	.00	.00	
03-005-3886	MAR CAM EZ BOND PREMIX 55	.00		.00	1,045.00	.00	
03-005-3916	DRUM EZ BOND P50	.00		.00	.00	.00	
03-005-3916	GROUP TOTAL	.00		.00	1,045.00	2,286.90	
03-007-3710	#300 LBS TERCOO CRUCIBLE	.00		.00	.00	.00	
03-007-3710	GROUP TOTAL	.00		.00	.00	.00	
03-008-3333	H6G KLEAN KAST-100	.00		.00	3,700.95	10,155.00	24,371.93
03-008-3333	GROUP TOTAL	.00		.00	3,700.95	10,155.00	24,371.93
03	TRANSACTION TOTAL	.00		.00	3,700.95	18,524.70	32,003.03
05-000-0000	DIRECT SHIPMENT	2,831.90		2,374.72	22,803.71	26,922.64	
05000	GROUP TOTAL	2,831.90		2,374.72	22,803.71	26,922.64	
05-005-0000	DIRECT SHIPMENT-MARCAH	16,893.00		.00	130,323.24	243,513.00	
05005	GROUP TOTAL	16,893.00		.00	130,323.24	243,513.00	
05-008-0000	DIRECT SHIPMENT-KLEAN CAS	.00		.00	.00	.00	
05008	GROUP TOTAL	.00		.00	.00	.00	
05-010-0000	DIRECT SHIPMENT-AMRCN COILED	4,600.00		4,200.00	63,627.58	48,300.00	
05010	GROUP TOTAL	4,600.00		4,200.00	63,627.58	48,300.00	
05-015-0000	DIRECT SHIPMENT-BENNET & CL	.00		.00	.00	.00	
05015	GROUP TOTAL	.00		.00	.00	.00	
05-040-0000	DIRECT SHIPMENT-FEDERAL O	.00		.00	142.00	.00	
05040	GROUP TOTAL	.00		.00	142.00	.00	
05	TRANSACTION TOTAL	24,324.90		6,574.72	216,896.53	318,735.64	

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THE HILL & GRIFFITH COMPANY

REPORT NO. 98

TOP 500 CUSTOMERS

PRODUCT SALES BY CUSTOMER BY SALESMAN

REEDY 17

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CUST. NO.		CUSTOMER NAME		PRODUCT DESCRIPTION		***** THIS MONTH *****		***** YEAR-TO-DATE *****	
TR. GP. CODE		PRODUCT DESCRIPTION		THIS YEAR		LAST YEAR		THIS YEAR	
LAST YEAR		LAST YEAR		THIS YEAR		LAST YEAR		THIS YEAR	
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200
201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250
251	252	253	254	255	256	257	258	259	260
261	262	263	264	265	266	267	268	269	270
271	272	273	274	275	276	277	278	279	280
281	282	283	284	285	286	287	288	289	290
291	292	293	294	295	296	297	298	299	300
301	302	303	304	305	306	307	308	309	310
311	312	313	314	315	316	317	318	319	320
321	322	323	324	325	326	327	328	329	330
331	332	333	334	335	336	337	338	339	340
341	342	343	344	345	346	347	348	349	350
351	352	353	354	355	356	357	358	359	360
361	362	363	364	365	366	367	368	369	370
371	372	373	374	375	376	377	378	379	380
381	382	383	384	385	386	387	388	389	390
391	392	393	394	395	396	397	398	399	400
401	402	403	404	405	406	407	408	409	410
411	412	413	414	415	416	417	418	419	420
421	422	423	424	425	426	427	428	429	430
431	432	433	434	435	436	437	438	439	440
441	442	443	444	445	446	447	448	449	450
451	452	453	454	455	456	457	458	459	460
461	462	463	464	465	466	467	468	469	470
471	472	473	474	475	476	477	478	479	480
481	482	483	484	485	486	487	488	489	490
491	492	493	494	495	496	497	498	499	500
501	502	503	504	505	506	507	508	509	510
511	512	513	514	515	516	517	518	519	520
521	522	523	524	525	526	527	528	529	530
531	532	533	534	535	536	537	538	539	540
541	542	543	544	545	546	547	548	549	550
551	552	553	554	555	556	557	558	559	560
561	562	563	564	565	566	567	568	569	570
571	572	573	574	575	576	577	578	579	580
581	582	583	584	585	586	587	588	589	590
591	592	593	594	595	596	597	598	599	600
601	602	603	604	605	606	607	608	609	610
611	612	613	614	615	616	617	618	619	620
621	622	623	624	625	626	627	628	629	630
631	632	633	634	635	636	637	638	639	640
641	642	643	644	645	646	647	648	649	650
651	652	653	654	655	656	657	658	659	660
661	662	663	664	665	666	667	668	669	670
671	672	673	674	675	676	677	678	679	680
681	682	683	684	685	686	687	688	689	690
691	692	693	694	695	696	697	698	699	700
701	702	703	704	705	706	707	708	709	710
711	712	713	714	715	716	717	718	719	720
721	722	723	724	725	726	727	728	729	730
731	732	733	734	735	736	737	738	739	740
741	742	743	744	745	746	747	748	749	750
751	752	753	754	755	756	757	758	759	760
761	762	763	764	765	766	767	768	769	770
771	772	773	774	775	776	777	778	779	780
781	782	783	784	785	786	787	788	789	790
791	792	793	794	795	796	797	798	799	800
801	802	803	804	805	806	807	808	809	810
811	812	813	814	815	816	817	818	819	820
821	822	823	824	825	826	827	828	829	830
831	832	833	834	835	836	837	838	839	840
841	842	843	844	845	846	847	848	849	850
851	852	853	854	855	856	857	858	859	860
861	862	863	864	865	866	867	868	869	870
871	872	873	874	875	876	877	878	879	880
881	882	883	884	885	886	887	888	889	890
891	892	893	894	895	896	897	898	899	900
901	902	903	904	905	906	907	908	909	910
911	912	913	914	915	916	917	918	919	920
921	922	923	924	925	926	927	928	929	930
931	932	933	934	935	936	937	938	939	940
941	942	943	944	945	946	947	948	949	950
951	952	953	954	955	956	957	958	959	960
961	962	963	964	965	966	967	968	969	970
971	972	973	974	975	976	977	978	979	980
981	982	983	984	985	986	987	988	989	990
991	992	993	994	995	996	997	998	999	1000



Hill and Griffith Company Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

N.A. = NOT APPLICABLE

N.E. = NOT ESTABLISHED

I. PRODUCT IDENTIFICATION

PRODUCT NAME (s): Red Chief Dry Core Paste

Manufacturer: The Hill & Griffith Co.
Address: 1262 State Avenue
Cincinnati, Ohio 45204

Telephone: (513) 921-1075 Fax: (513) 921-9180

EMERGENCY

TELEPHONE: (800) 424-9300
Call Chemtrec

II. HAZARDOUS MATERIAL IDENTIFICATION SYSTEM *

CATEGORY	RATING	LEGEND
Flammability	1	1=Slight Hazard
Health	2	2=Moderate Hazard
Reactivity	0	0=Minimal Hazard
Personal Protection	B	B=Glasses and Gloves

- These ratings are based on NFPA regulations

III. HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	CAS.NO.	ACGIH THRESHOLD LIMIT VALUE	%	OSHA PERMISSIBLE RANGE	EXPOSURE LIMIT
Iron Oxide	1317-60-8	5 mg/m ³	5-10	NE	
Inert Nuisance Dusts	Mixture	10 mg/m ³	50-60	15 mg/m ³	

- As respirable dust

@ This material contains Silicon Dioxide in some form. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to Humans (Volume 42, 1987) concludes that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals, and that there is limited evidence of the carcinogenicity of crystalline silica to humans. Classified by the IARC as 2A.

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IV. PHYSICAL/CHEMICAL PROPERTIES

Appearance and Odor: Red powder, sweet odor.

Water Solubility: Miscible.

Melting Point(°F): NA

Boiling Range(°F): NA

Specific Gravity(water=1): NE

Vapor Pressure(mmHg): NA

Percent Volatile By Weight: NA

Vapor Density(Air=1): NA
TPQ: NA

Evaporation Rate(Butyl Acetate=1): NA
RQ: NA

V. FIRE AND EXPLOSION INFORMATION

Flash Point(C.O.C.)(°F): NA

Auto-Ignition Temperature(°F): NE

Flammable Limits: LEL: NE UEL: NE

Extinguishing Media: Alcohol foam, CO₂, or chemical.

Unusual Fire or Explosion Hazards: Material may burn in the presence of flames or high heat sources.

Special Fire-Fighting Procedures: Use full facepiece with self-contained breathing apparatus when fighting fires near this product.

VI. CHEMICAL REACTIVITY INFORMATION

Conditions Contributing to Instability: None.

Incompatible Materials: Strong acids or oxidizers.

Conditions to Avoid: None.

Hazardous Decomposition Products: Various oxides of carbon and hydrogen.

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VII. HEALTH HAZARDS A. Summary/Risks

Signs and Symptoms of Overexposure: Eyes- irritation with redness and swelling; Skin- may irritate; Inhalation- may cause coughing and sneezing.

Medical Conditions Generally Aggravated by Exposure: May aggravate pre-existing medical conditions.

Primary Route(s) of Entry: Inhalation, skin contact, and ingestion.

Target Organs: Eyes, lungs, and skin.

Acute Health Effect: Overexposure could lead to skin irritations and lung or mucous membrane irritation.

Chronic Health Effect: Overexposure could lead to severe damage to skin, eyes, lungs, or mucous membranes.

Carcinogenicity: See page 1.

Notes to Physician: None.

VII. HEALTH HAZARDS B. First Aid/Emergency Procedures

Inhalation: If overcome, immediately remove from exposure and seek medical attention.

Skin Contact/Absorption: Wash skin thoroughly with soap and water. If irritation develops, seek medical attention.

Eye Contact: Flush with clear flowing water for at least 15 minutes. If irritation persists, seek medical attention.

Ingestion: If ingested, DO NOT induce vomiting; call a physician immediately.

VIII. SPILL, LEAK AND WASTE DISPOSAL PROCEDURES

Procedures for clean-up of spills/leaks: Stop spill as soon as possible. Scoop up or clean up using best means possible. Water may be used to clean area. Notify proper authorities if the need exists.

Waste Disposal: Waste generated during application, demolition, breakage or spillage may be hazardous wastes as defined by RCRA (40 CFR part 261). Place waste and spillage in closed containers. Dispose of in approved landfill in accordance with federal, state and local regulations.

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IX. PROTECTION AND CONTROL INFORMATION

Hygienic Practices: Minimize breathing vapors, mists, fumes or dusts. Avoid prolonged or repeated contact with skin. Remove contaminated clothes, launder before reuse. Remove contaminated shoes; clean before reuse.

Ventilation Requirements: Provide ventilation sufficient to prevent exceeding recommended exposure limits.

Respiratory Protection: Use NIOSH approved organic cartridge Type 7 respirator for vapors and/or a fine particulate filter for dusts, if necessary.

Eye Protection: Use safety glasses, splash goggles, or face shield when eye contact may occur.

Protective Gloves: Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

Other Clothing and Equipment: As required to prevent contact.

Engineering Controls/Work Practices: Keep containers and storage containers closed when not in use.

Special Considerations for Repair/Maintenance of Contaminated Equipment: Provide adequate respiratory, eye and skin protection.

X. PRECAUTIONS FOR SAFE HANDLING AND USE

Storage Segregation: Always segregate materials by major hazard class.

Special Handling/Storage: Do not transfer contents to unlabeled container(s).

Other: Comply with all federal, state and local regulations.

XI. DOT SHIPPING REQUIREMENTS

Shipping Name(s): Any Packaging

Compound, Adhesive

Date Prepared: 07-28-97

Supersedes: 10-14-93

Print Date: 07-28-97

Prepared by: Lori R. Yeager

Title: Corporate Government Regulatory Manager

As of the date of preparation of this document, the forgoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

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HPD093

Single Level Explosion

5/22/98 15:55:24

Part Number 616635

RED CHIEF CORE PASTE DRY 400#

Quantity Required ..

1.0000 UM ... LB

Qty	Component	Part	Description	UM	UM	F	Sk	Pu	T	S	Qty	Per	Extended
													Quantity
200	610188		DRUM FIBER WITH LID 55GAL	EA	EA	P	Y				.00250		
200	612138		CLAY FIRE COARSE 50# BAGS	LB	TN	P	Y				.59700		.60
200	612490		LINER .004 POLY 38X64 FOR	EA	EA	P	Y				.00250		
200	612998		GOULAC 50# BAGS	LB	LB	P	Y				.32240		.32
200	613113		IRON OXIDE (RED) 100# BAG	LB	TN	P	Y				.08060		.08

ALL AVAILABLE DATA HAS BEEN DISPLAYED

HPD00001

F5=Refresh F12=Previous Roll=Page

MATERIAL SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be consulted for specific requirements.

N.A. = NOT APPLICABLE

N.E. = NOT ESTABLISHED

I. PRODUCT IDENTIFICATION

PRODUCT NAME (s): Slik Box

Manufacturer: Hill and Griffith Co.
Address: 1262 State Avenue
Cincinnati, Ohio 45204

TELEPHONE: (800) 543-0425
Hours: 8:00 A.M. - 5:00 P.M.
Fax: 513-921-9180

II. HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

CATEGORY	RATING	LEGEND
Flammability	1	1=Slight Hazard
Health	0	0=Minimal Hazard
Reactivity	0	0=Minimal Hazard
Personal Protection	E	E=Glasses, Gloves and Dust Respirator

III. HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	CAS.NO	ACGIH THRESHOLD LIMIT VALUE	% RANGE	OSHA PERMISSABLE EXPOSURE LIMIT
NONE	none	na		na
Talc	14807-96-9	2 mg/m3	55-65	2 mg/m3

* As respirable dust

@ This material contains Silicon Dioxide in some form. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to Humans (Volume 42, 1987) concludes that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals, and that there is limited evidence of the carcinogenicity of crystalline silica to humans.

Classified by the IARC as 2A

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FOR CHEMICAL EMERGENCY, SPILL,
LEAK, EXPOSURE OR ACCIDENT CALL
CHEMTREC DAY OR NIGHT AT
1-800-424-9300

=====

IV. PHYSICAL/CHEMICAL PROPERTIES

=====

Appearance and Odor: White powder, slight fatty odor.

Water Solubility: NEGLIGIBLE

Melting Point(oF): 135

Boiling Range(oF): >650

Specific Gravity(water=1): 1

Vapor Pressure(mmHg): na

Percent Volatile By Weight: neg.

Vapor Density(Air=1): na

Evaporation Rate(Butyl Acetate=1): na

TPQ: na

RQ: na

=====

V. FIRE AND EXPLOSION INFORMATION

=====

Flash Point(C.O.C.)(oF): 370

Auto-Ignition Temperature(oF): na

Flammable Limits:

LEL na

UEL na

Extinguishing Media: CO2, Dry Chemical, Foam, Water Fog.

Unusual Fire or Explosion Hazards: None

Special Fire-Fighting Procedures: Use full facepiece with self contained breathing apparatus when fighting fires near this product

=====

VI. CHEMICAL REACTIVITY INFORMATION

=====

Conditions Contributing to Instability: None.

Incompatible Materials: N.E.

Conditions to Avoid: None.

Hazardous Decomposition Products: Various oxides of carbon and possibly nitrogen.

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=====

VII. HEALTH HAZARDS A. Summary/Risks

=====

Signs and Symptoms of Overexposure: Overexposure could result in coughing, sneezing, shortness of breath or other respiratory problems. Other symptoms may result.

Medical Conditions Generally Aggravated by Exposure: May aggravate pre-existing medical conditions

Primary Route(s) of Entry: Inhalation.

Target Organs: Eyes and lungs

Acute Health Effect: Overexposure could result in temporary mucous membrane or respiratory tract irritation.

Chronic Health Effect:

Carcinogenicity: This product is not considered a carcinogen by the ACGIH, NTP, IARC, or OSHA.

Notes to Physician: None.

=====

VII. HEALTH HAZARDS B. FIRST AID/EMERGENCY PROCEDURES

=====

Inhalation: If overcome, immediately remove from exposure and seek medical attention

Skin Contact/Absorption: Wash skin thoroughly with soap and water. If irritation develops, seek medical attention

Eye Contact: Flush with clear flowing water for at least 15 minutes. If irritation persists, seek medical attention.

Ingestion: If ingested, DO NOT induce vomiting; call a physician immediately.

=====

VIII. SPILL, LEAK AND WASTE DISPOSAL PROCEDURES

=====

Procedures for clean-up of spills/leaks: on as possible. Scoop up or clean up using best means possible. Water may be used to clean area. Notify proper authorities if the need exists.

Contain spill

Waste Disposal: Waste generated during application, demolition, breakage or spillage are not hazardous wastes as defined by RCRA (40 CFR part 261). Place waste and spillage in closed containers. Dispose of in approved landfill in accordance with federal, state and local regulations.

=====

IX. PROTECTION AND CONTROL INFORMATION

=====

Hygeinic Practices: Minimize breathing vapors, mists, fumes or dusts. Avoid prolonged or repeated contact with skin. Remove contaminated clothes, launder before reuse. Remove contaminated shoes; clean before reuse.

Ventilation Requirements: Provide ventilation sufficient to prevent exceeding recommended exposure limits.

Respiratory Protection: Use NIOSH approved organic cartridge Type 7 respirator

Eye Protection: Use safety glasses, splash goggles or face shield when eye contact may occur

Protective Gloves: Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact

Other Clothing and Equipment: As required to prevent contact

Engineering Controls/Work Practices: Keep containers and storage containers closed when not in use.

Special Considerations for Repair/Maintenance of Contaminated Equipment: Provide adequate respiratory, eye and skin protection.

=====

X. PRECAUTIONS FOR SAFE HANDLING AND USE

=====

Storage Segregation: Always segregate materials by major hazard class.

Special Handling/Storage: Do not transfer contents to unlabeled container(s).

Other: Comply with all federal, state and local regulations.

=====

XI. DOT SHIPPING REQUIREMENTS

=====

Shipping Name: Foundry Core Compound, NOI

Hazard Class: None.

Identification Number: None

Label(s) Required: None.

=====

Date Prepared: 04-27-1990

Prepared by: Steve Neltner

Title : Lab Manager

=====

As of the date of preparation of this document, the forgoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

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HPD093

Single Level Explosion

5/22/98 15:56:19

Part Number 616166 SLIK BOX 260# DRUMS
Quantity Required .. 1.0000 UM ... LB

Seq	Component	Part	Description	UM	UM	F	Sk	Pu	T	S	Qty	Per	Extended Quantity
00	612222		INDUSTRINE R SPRAYED	LB	LB	P	Y				.91420		.91
00	612250		HY-SIL 233	LB	LB	P	Y				.03730		.04
00	612490		LINER .004 POLY 38X64 FOR EA	EA	EA	P	Y				.00380		
00	612505		DRUM STEEL O/H UNLINED BL	EA	EA	P	Y				.00380		
00	613113		IRON OXIDE (RED) 100# BAG	LB	TN	P	Y				.04850		.05

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Hill and Griffith Company

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

N.A. = NOT APPLICABLE

N.E. = NOT ESTABLISHED

I. PRODUCT IDENTIFICATION

PRODUCT NAME (s): Pyroseal Mudding Compound

Manufacturer: The Hill & Griffith Co.

Address: 1262 State Avenue
Cincinnati, Ohio 45204

Telephone: (513) 921-1075

Fax: (513) 921-9180

EMERGENCY

TELEPHONE: (800) 424-9300

Call Chemtrec

II. HAZARDOUS MATERIAL IDENTIFICATION SYSTEM *

CATEGORY	RATING	LEGEND
Flammability	0	0=Minimal Hazard
Health	1	1=Slight Hazard
Reactivity	0	0=Minimal Hazard
Personal Protection	B	B=Glasses and gloves

- These ratings are based on NFPA regulations

III. HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	CAS.NO.	ACGIH THRESHOLD LIMIT VALUE	% RANGE	OSHA PERMISSIBLE EXPOSURE LIMIT
Water	7732-18-5	NA	25-35	NA
Silica	14808-60-7	0.1 mg/m ³ *	30-35	0.1 mg/m ³ *
Hydrous Calcium Magnesium Silicate	14807-96-6	2 mg/m ³ *	15-20	20 mppcf
Hydrated Aluminum Silicate	1332-58-7	2 mg/m ³ *	5-8	5 mg/m ³ *
Clay	1318-93-0	15 mg/m ³ **	3-7	5 mg/m ³ *
Kerosene	8008-20-6	NE	< 5	NE

* - Respirable Dust; ** - Total Dust.

This material contains Silicon Dioxide in some form. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to Humans (Volume 42, 1987) concludes that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals, and that there is limited evidence of the carcinogenicity of crystalline silica to humans. Classified by the IARC as 2A.

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PHYSICAL/CHEMICAL PROPERTIES

Appearance and Odor: White to tan paste with earthy and slight solvent odor.

Water Solubility: Miscible

Melting Point(°F): Not applicable.

Boiling Range(°F): 212

Specific Gravity(water=1): 1.7

Vapor Pressure(mmHg): As for Water

Percent Volatile By Weight: 25-35

Vapor Density(Air=1): NE
TPQ: NA

Evaporation Rate(Butyl Acetate=1): NE
RQ: NA

V. FIRE AND EXPLOSION INFORMATION

Flash Point(C.O.C.)(°F): None.

Auto-Ignition Temperature(°F): Not applicable.

Flammable Limits: LEL: Not applicable.

UEL: Not applicable.

Extinguishing Media: Does not burn.

Unusual Fire or Explosion Hazards: Not applicable.

Special Fire-Fighting Procedures: Use full facepiece with self-contained breathing apparatus when fighting fires near this product.

VI. CHEMICAL REACTIVITY INFORMATION

Conditions Contributing to Instability: Not applicable.

Incompatible Materials: Strong oxidizing materials.

Conditions to Avoid: Not applicable.

Hazardous Decomposition Products: Not applicable.

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VII. HEALTH HAZARDS A. Summary/Risks

Signs and Symptoms of Overexposure: May cause eye irritation, minor skin irritation, coughing or shortness of breath. May cause irritation of mucous membranes of the nose, throat, and respiratory tract. Gastrointestinal distress if swallowed in large amounts.

Medical Conditions Generally Aggravated by Exposure: May aggravate pre-existing medical conditions.

Primary Route(s) of Entry: Absorption, inhalation, and ingestion.

Target Organs: Eyes, skin, and mucous membranes.

Acute Health Effect: May irritate noses and throat with possible minor skin irritation. Seek medical attention if ingested, although first-aid is normally not required.

Chronic Health Effect: Exposure to dust may result in silicosis.

Carcinogenicity: See page 1.

Notes to Physician: Gastrointestinal distress if large amounts of product are swallowed.

VII. HEALTH HAZARDS B. First Aid/Emergency Procedures

Inhalation: If overcome, immediately remove from exposure and seek medical attention if irritation or discomfort persists.

Skin Contact/Absorption: Wash skin thoroughly with soap and water. If irritation develops, seek medical attention.

Eye Contact: Flush with clear flowing water for at least 15 minutes. If irritation persists, seek medical attention.

Ingestion: If ingested, this product is not expected to be an acute ingestion problem. First-aid is normally not required, but seek medical advice.

VIII. SPILL, LEAK AND WASTE DISPOSAL PROCEDURES

Procedures for clean-up of spills/leaks: Use respiratory protection. Apply water to spilled material to minimize dust. Stop spill as soon as possible. Scoop up or clean up using best means possible. Water may be used to clean area. Notify proper authorities if the need exists.

Waste Disposal: Waste generated during application, demolition, breakage or spillage may be hazardous wastes as defined by RCRA (40 CFR part 261). Place waste and spillage in closed containers. Dispose in accordance with federal, state and local regulations.

PROTECTION AND CONTROL INFORMATION

Hygienic Practices: Minimize breathing vapors, mists, fumes or dusts. Avoid prolonged or repeated contact with skin. Remove contaminated clothes, laundry before reuse. Remove contaminated shoes; clean before reuse.

Ventilation Requirements: Provide ventilation, such as local mechanical exhaust, sufficient to prevent exceeding recommended exposure limits.

Respiratory Protection: Use NIOSH approved respirator with a fine particulate filter or approved dust mask for dusts, if necessary.

Eye Protection: Use safety glasses with side shields.

Protective Gloves: Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

Other Clothing and Equipment: As required to prevent contact.

Engineering Controls/Work Practices: Keep containers and storage containers closed when not in use.

Special Considerations for Repair/Maintenance of Contaminated Equipment: Provide adequate respiratory, eye and skin protection.

X. PRECAUTIONS FOR SAFE HANDLING AND USE

Storage Segregation: Always segregate materials by major hazard class.

Special Handling/Storage: Do not transfer contents to unlabeled container(s). Minimize the amount of airborne dust present in handling and storage by using an enclosed handling system.

Other: Comply with all federal, state and local regulations.

XI. DOT SHIPPING REQUIREMENTS

Shipping Name(s): Any Packaging Caulking Compound, N.O.I.

Date Prepared: 07/23/97
Prepared by: Lori R. Yeager

Supersedes: 03/24/97
Title: Corporate Government Regulatory Manager

Print Date: 7/25/97

As of the date of preparation of this document, the forgoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

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Part Number 616177
 Quantity Required ..

PYROSEAL CLASSIC 700# DRUM
 1.0000 UM ... LB

Qty	Component Part	Description	UM	UM	F	Sk	Pu	T	S	Qty Per	Extended Quantity
:00 612044		PYRAX RG 140	LB	TN	P	Y				.17580	.18
:00 612045		CRESSLUBE 100/ TEXPRO 100	LB	GL	P	Y				.03020	.03
:00 612139		CLAY CHINA 50# BAGS	LB	TN	P	Y				.01180	.01
:00 612213		DOWICIDE (A) 50# BAGS	LB	LB	P	Y				.00250	
:00 612272		WATER	LB	LB	P	Y				.23560	.24
:00 612490		LINER .004 POLY 38X64 FOR	EA	EA	P	Y				.00140	
:00 612498		DRUM STEEL O/H LINED RULE	EA	EA	P	Y				.00140	
:00 612627		WESTERN BENTONITE 100# BA	LB	TN	P	Y				.01980	.02
:00 613900		TALC NYTAL 100 50# BAGS	LB	TN	P	Y				.52430	.52

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Hill and Griffith Company Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

N.A. = NOT APPLICABLE

N.E. = NOT ESTABLISHED

I. PRODUCT IDENTIFICATION

PRODUCT NAME (s): EZ Dry Core and Mold Coating

Manufacturer: The Hill & Griffith Co.

Address: 1262 State Avenue
Cincinnati, Ohio 45204

Telephone: (513) 921-1075

Fax: (513) 921-9180

EMERGENCY

TELEPHONE: (800) 424-9300

Call Chemtrec

II. HAZARDOUS MATERIAL IDENTIFICATION SYSTEM *

CATEGORY	RATING	LEGEND
Flammability	2	2-Moderate Hazard
Health	1	1-Slight Hazard
Reactivity	0	0-Minimal Hazard
Personal Protection	H	H-Splash Goggles, Gloves, Apron, Vapor Respirator

* These ratings are based on NFPA regulations

III. HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	CAS.NO.	ACGIH THRESHOLD LIMIT VALUE	% RANGE	OSHA PERMISSIBLE EXPOSURE LIMIT
Aliphatic Petroleum Distillate	8052-41-3	100 ppm or 525 mg/m ³	40-50	100 ppm or 525 mg/m ³
Graphite	7782-42-5	2 mg/m ³	30-40	15mppcf
1-Hydroxyethyl-2-Tell Oil	61791-39-7	NE	0-5	NE

This material contains crystalline silica. The International Agency for Research on Cancer (IARC) Monograph Silica, Some Silicates and Organic Fibres (Volume 68, 1997) has determined that crystalline silica in the form of quartz or cristobalite from occupational exposures, if inhaled, is carcinogenic to humans (IARC Group 1). Prolonged inhalation of silica dust may result in silicosis, a progressive, disabling, and sometimes fatal, lung disease. Avoid creating dusty conditions and use a NIOSH/MSHA approved dust respirator when Threshold limit Values (TLVs) may be exceeded.

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IV. PHYSICAL/CHEMICAL PROPERTIES

Appearance and Odor: Silver-black paste with petroleum aliphatic odor.

Water Solubility: Negligible.

Melting Point(°F): NA

Boiling Range(°F): 305

Specific Gravity(water=1): 1.08

Vapor Pressure(mmHg): 1.5

Percent Volatile By Weight: 40-50

Vapor Density(Air=1): 3.9
TPQ: NA

Evaporation Rate(Butyl Acetate=1): NE
RQ: NA

V. FIRE AND EXPLOSION INFORMATION

Flash Point(C.O.C.)(°F): 141

Auto-Ignition Temperature(°F): 450-500

Flammable Limits: LEL: 0.8

UEL: NA

Extinguishing Media: Carbon Dioxide, dry chemical, foam, or water fog.

Unusual Fire or Explosion Hazards: High heat may cause spontaneous combustion.

Special Fire-Fighting Procedures: Use full facepiece with self-contained breathing apparatus when fighting fires near this product.

VI. CHEMICAL REACTIVITY INFORMATION

Conditions Contributing to Instability: None.

Incompatible Materials: Strong acids or oxidizers.

Conditions to Avoid: Storage near extreme heat, open flames, or electrical arcs.

Hazardous Decomposition Products: Carbon monoxide and water vapor. May produce oxides of sulfur and nitrogen.

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VII. HEALTH HAZARDS A. Summary/Risks

Signs and Symptoms of Overexposure: Overexposure could result in skin irritation and chapping. Inhalation of vapors may cause headache and nausea.

Medical Conditions Generally Aggravated by Exposure: May aggravate pre-existing medical conditions.

Primary Route(s) of Entry: Skin contact and inhalation.

Target Organs: Eyes, lungs, and skin.

Acute Health Effect: Overexposure could result in respiratory tract and mild skin irritations that are reversible.

Chronic Health Effect: Overexposure could result in respiratory tract and mild skin irritations that are irreversible.

Carcinogenicity: See page 1.

Notes to Physician: None.

VII. HEALTH HAZARDS B. First Aid/Emergency Procedures

Inhalation: If overcome, immediately remove from exposure and seek medical attention.

Skin Contact/Absorption: Wash skin thoroughly with soap and water. If irritation develops, seek medical attention.

Eye Contact: Flush with clear flowing water for at least 15 minutes. If irritation persists, seek medical attention.

Ingestion: If ingested, DO NOT induce vomiting; call a physician immediately.

VIII. SPILL, LEAK AND WASTE DISPOSAL PROCEDURES

Procedures for clean-up of spills/leaks: Stop spill as soon as possible. Scoop up or clean up using best means possible. Water may be used to clean area. Notify proper authorities if the need exists.

Waste Disposal: Waste generated during application, demolition, breakage or spillage may be hazardous wastes as defined by RCRA (40 CFR part 261). Place waste and spillage in closed containers. Dispose of in approved landfill in accordance with federal, state and local regulations.

PRINTED IN THE U.S.A.

IX. PROTECTION AND CONTROL INFORMATION

Hygienic Practices: Minimize breathing vapors, mists, fumes or dusts. Avoid prolonged or repeated contact with skin. Remove contaminated clothes, launder before reuse. Remove contaminated shoes; clean before reuse.

Ventilation Requirements: Provide ventilation sufficient to prevent exceeding recommended exposure limits.

Respiratory Protection: Use NIOSH approved organic cartridge Type 7 respirator for vapors and/or a fine particulate filter for dusts, if necessary.

Eye Protection: Use safety glasses, splash goggles, or face shield when eye contact may occur.

Protective Gloves: Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

Other Clothing and Equipment: As required to prevent contact.

Engineering Controls/Work Practices: Keep containers and storage containers closed when not in use.

Special Considerations for Repair/Maintenance of Contaminated Equipment: Provide adequate respiratory, eye and skin protection.

X. PRECAUTIONS FOR SAFE HANDLING AND USE

Storage Segregation: Always segregate materials by major hazard class.

Special Handling/Storage: Do not transfer contents to unlabeled container(s).

Other: Comply with all federal, state and local regulations.

XI. DOT SHIPPING REQUIREMENTS

Shipping Name(s):	> 119 gallons	Petroleum Distillates, N.O.S., Combustible Liquid, UN 1268, PG III
	< 119 gallons	Compound, Thermal Insulating

Date Prepared: 12/16/97
Prepared by: Lori R. Yeager

Supersedes: 10/01/93
Title: Corporate Government Regulatory Manager

Print Date: 12/16/97

As of the date of preparation of this document, the forgoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

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IPD093

Single Level Explosion

5/22/98 15:53:37

Part Number 116159 EZ DRY PLASTIC MOLD SPRAY 520#
Quantity Required .. 1.0000 UM ... LB

Rtg	Seq	Component	Part	Description	UM	UM	F	Sk	Pu	T	S	Qty	Per	Extended
														Quantity
010	112037			GRAPHITE CHINESE #280 50#	LB	LB	P	Y				.38000		.38
010	112137			RESIN 425-30 360# DRUM	LB	LB	P	Y				.00700		.01
010	112201			MINERAL SPIRITS RULE66 35	LB	LB	P	Y				.49760		.50
010	112230			CHEMAZINE TO(H) 420# DRUM	LB	LB	P	Y				.02730		.03
010	112242			ABI GEL 100# BAGS (WYOGEL	LB	TN	P	Y				.04400		.04
010	112255			ATTAGEL #20 50# BAGS	LB	LB	P	Y				.04300		.04
010	112272			WATER	LB	LB	P	Y				.00110		
010	112505			DRUM STEEL O/H UNLINED DK	EA	EA	P	Y				.00200		

ALL AVAILABLE DATA HAS BEEN DISPLAYED

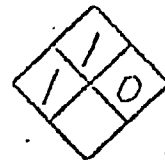
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MATERIAL SAFETY DATA SHEET

(Approved by U. S. Department of Labor. "Essentially Similar" to Form LSB-005-4)

OSHA 701 DESIGNATION



FSMG-72-1

N/A is Not Applicable

FOR METAL CASTING SUPPLIES

UNK is Unknown

SECTION 1 - SOURCE AND NOMENCLATURE

FACTURERS NAME e Hill & Griffith Company		EMERGENCY TELEPHONE NO. Area Code 513 Number 921-1075	
ESS (NUMBER, STREET, CITY, STATE, ZIP CODE) 62 State Avenue Cincinnati, Ohio 45204		CODE NO., TRADE NAME, SYNONYMS No. 1 Ebony Core Compound (Pitch)	
ICAL NAME AND SYNONYMS Petroleum Pitch		CHEMICAL FAMILY Hydrocarbon	
ADDED USES (CHECK APPROPRIATE ONES):		MOLECULAR FORMULA Complex	
☐ Binders (Curing)	☒ Binders (Non-Curing)	☒ Additives	☐ Partings
☐ Castables and Exothermics	☐ Others	☒ Facings	☐ Metal Additives

SECTION 2 - HAZARDOUS INGREDIENTS

MATERIAL OR INGREDIENT IN PRODUCT: (IS IN CONTAINER BEFORE USE):	ESTABLISHED OSHA STANDARD TLV (UNITS) ETC.	LD ₅₀		LC ₅₀	SPECIES TESTED
		ORAL	SKIN	INHALATION	
Petroleum Pitch, Pulverized	Unk	No safe	limits have	been established	
(TLV - 100 ppm) - see boiling point Section 3 for Aromatic Hydrocarbon)					
		See Section 6			
FOR REFERENCE ONLY					
ADDITIONAL (ONLY DURING USE):					
See Section 6		See Section 6			

REMARKS: (CAN BE USED TO STATE THAT ENTIRE PRODUCT IS NON-HAZARDOUS BY OSHA DEFINITION):

SECTION 3 - PHYSICAL DATA

ENTIRE PRODUCT	OR INGREDIENT (NAME)	PROPERTY
Boiling Point (°F.)	Over 850°F	Vapor Pressure (mmHg) less than 1
Boiling Point (°F.) (Give Method)	300°-310°F - R&B	Vapor Density (Air = 1) above 1
Specific Gravity (Water = 1)	1.30	Evaporation Rate (0 = 1)
Solubility in Water (Product)	nil	Volatile _____ % Vol. _____ % Wt.
Flash Point (Product)	Black powder...	Nil @ 70°F
Odor (Product)	...with slight aromatic odor	Other:

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT 500 °F. _____ °C. (Used) Cleveland Open Cup	FLAMMABLE EXPLOSIVE LIMITS Name: 35 mg/liter
EXTINGUISHING MEDIA: CO₂ - Water fog, -dry chemicals	
FIRE FIGHTING PROCEDURES: Water or foam may cause frothing and spread fire. If excessive fume smoke is encountered, wear self contained respiratory equip. (USBM Canister Unit)	
ADDITIONAL FIRE AND EXPLOSION HAZARDS: Dust explosion possible. Flammable limit greater than .04 oz/cu. ft. dust in air.	



The HILL and GRIFFITH Company
Quality and Service Since 1836

Corporate Office
1085 Summer Street
Cincinnati, Ohio 45204
1-800-543-0425 • 513-921-1075
Fax 513-921-9130

WESTERN BENTONITE

Hill and Griffith offers the finest available grades of **WESTERN BENTONITE** to meet the requirements of foundries producing steel and gray, ductile or malleable iron castings.

WESTERN BENTONITES provide foundry sand systems with high hot and green strength properties. Works well with fine or coarse grain synthetic sands.

- **Higher dry and hot strengths minimize sand erosion**
- **Imparts higher green strengths at lower moisture content to maximize mold permeability and reduce gas or pinhole defects**
- **Permits use of finer sands which produce superior casting finish.**

Typical Chemical Analysis

SiO ₂	60.00 - 62.00
Al ₂ O ₃	20.00 - 23.00
Fe ₂ O ₃	3.00 - 4.00
MgO	1.50 - 3.00
CaO	0.50 - 1.50
K ₂ O	0.40 - 0.50
Na ₂ O	2.00 - 2.70
TiO ₂	2.50 Max.
Trace Elements	3.50 Max.
Moisture Uncombined	12.00 Max.
pH Value	8.00 Min.

Hill and Griffith **WESTERN BENTONITE** can be used in combination with Southern Bentonite to improve the versatility of the sand systems and achieve highest possible green strengths with somewhat lower dry and hot strengths.

Blend **WESTERN BENTONITE** with Fire Clay to develop maximum hot strength available from conventional Foundry Bonding Clays.

Hill and Griffith can provide different grades of **WESTERN BENTONITE** to meet specific foundry methods using dry or slurry applications for both mechanized and non-mechanized production.

WESTERN BENTONITE is available in the following grades: Granular Grade - Dustless, Pulverized 200 Mesh Grade - Foundry Grade, *Steel Grade Bentonite Specification Sheet available on request but is not available in Hill and Griffith premixes.

WESTERN BENTONITE

Hill and Griffith offers the finest available grades of Western Bentonite to meet the requirements of foundries producing steel and gray, ductile or malleable iron castings.

Western Bentonites provide foundry sand systems with high hot and green strength properties. Works well with fine or coarse grain synthetic sands.

- Higher dry and hot strengths minimize sand erosion
- Imparts higher green strengths at lower moisture content to maximize mold permeability and reduce gas or pinhole defects.
- Permits use of finer sands which produce superior casting finish.

typical chemical analysis

SiO ₂	60.00 - 62.00
Al ₂ O ₃	20.00 - 23.00
Fe ₂ O ₃	3.00 - 4.00
MgO	1.50 - 3.00
CaO	0.50 - 1.50
K ₂ O	0.40 - 0.50
Na ₂ O	2.00 - 2.70
TiO ₂	2.50 Max.
Trace Elements	3.50 Max.
Moisture Uncombined	12.00 Max.
pH Value	8.00 Min.

Hill and Griffith Western Bentonite can be used in combination with Southern Bentonite to improve the versatility of the sand systems and achieve highest possible green strengths with somewhat lower dry and hot strengths.

Blend Western Bentonite with Fire Clay to develop maximum hot strength available from conventional Foundry Bonding Clays.

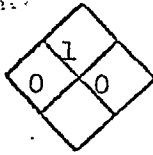
Hill and Griffith can provide different grades of Western Bentonite to meet specific foundry methods using dry or slurry applications for both mechanized and non-mechanized production.

(Approved by U. S. Department of Labor. "Essentially Similar" to Form LSB-00S-4)

NFPA 704 DESIGNATION

n FSMG-72-1 UNK is unknown
N/A is not applicable

FOR METAL CASTING SUPPLIES



MANUFACTURER'S NAME The Hill & Griffith Company		EMERGENCY TELEPHONE NO. Area Code 513 Number 921-1075	
ADDRESS (NUMBER, STREET, CITY, STATE, ZIP CODE) 1262 State Avenue, Cincinnati, Ohio 45204		CODE NO., TRADE NAME, SYNONYMS SLIK BOX	
CHEMICAL NAME AND SYNONYMS Proprietary mixture-Stearic acid, Iron oxide,		CHEMICAL FAMILY MOLECULAR FORMULA Complex	
INTENDED USES (CHECK APPROPRIATE ONES): and hydrated Amorphous silica			
Binders (Curing)	Binders (Non-Curing)	Additives	Partings X
			Facings
			Metal Additives
Castables and Exothermics		Others	Release Agent

[illegible]

ARKS: (CAN BE USED TO STATE THAT ENTIRE PRODUCT IS NON-HAZARDOUS BY OSHA DEFINITION):

Treat as nuisance dust with permissible exposure limits suggested 20 m.p.p.c.f.

ENTIRE PRODUCT		OR INGREDIENT (NAME)	
Melting Point (°F.)	> 650F	Vapor Pressure (mmHg)	N/A
Melting Point (°F.) (Give Method)	app. 120-150F	Vapor Density (Air = 1)	N/A
Specific Gravity (Water = 1)	app. 1	Evaporation Rate (negligible = 1)	
Solubility in Water (Product)		Volatile _____ % Vol. negligible % Wt.	
Units) Negligible		at 70° F.	
Appearance (Product) Pink powder		Other:	
(Product) mild fatty acid			

HIGH POINT <u>370</u> °F. _____ °C. (Method Used) <u>Open Cup</u>	FLAMMABLE EXPLOSIVE LIMITS Name: _____	LOWER <u>UNK</u>	UPPER <u>UNK</u>
EXTINGUISHING MEDIA: <u>Foam, dry powder or water fog</u>			
FIRE FIGHTING PROCEDURES: _____			

Do not use water stream under pressure.

UAL FIRE AND EXPLOSION HAZARDS:

Normal hazard only from organic dusts.

OBSOLETE

IC DEGREE (LEVEL OF PRODUCT):

IRRITANT-SKIN, EYE, RESPIRATORY

UNK

Possible skin, eye, respiratory

NAME ROUTE	NAME TOXIC INGREDIENTS
Inhalation Eye	Product is considered non toxic

SYMPTOMS OF OVEREXPOSURE: (CHEMICAL NAME AND CORRESPONDING SYMPTOMS)

Coughing, sneezing

ONIC EFFECTS:

UNK

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation: Remove from area into fresh air

Ingestion: Consult Physician

Skin Contact: soap & water wash

Other:

Eye Contact: flush with copious quantities of water-consult Physician

SECTION 6 - REACTIVITY DATA

ABILITY (CHECK ONE) CONDITIONS TO AVOID:

Stable ☒

Unstable

COMPATABILITY (MATERIALS TO AVOID):

NONE

HAZARDOUS DECOMPOSITION PRODUCTS:

Incomplete combustion may yield carbon monoxide & carbon dioxide

HAZARDOUS POLYMERIZATION (CHECK ONE):

CONDITIONS TO AVOID:

Will Not Occur ☒

Might Occur

SECTION 7 - SPILL OR LEAK PROCEDURES

BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Dike spill area with inert material such as sand.

WASTE DISPOSAL METHOD:

Remove to approved waste disposal area.

SECTION 8 - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS:

Exhaust Recommended

General Exhaust Recommended

TEFC motors recommended

Protective Equipment None required

PROTECTIVE EQUIPMENT (SPECIFY TYPES):

Eye Goggles-safety type recommended

Gloves not normally required

Respiratory NIOSH approved dust masks recommended

SECTION 9 - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Store in cool dry area. Keep container covered to protect from open flame or sparks.

EXTRA PRECAUTIONS:

NONE REQUIRED.

Information contained herein is correct to the best of our knowledge. The recommendations or suggestions contained in this data sheet are not a guarantee or representation as to results. We suggest that you evaluate these recommendations and suggestions in your own laboratory procedures. Our responsibility for claims arising from breach of warranty, negligence, or otherwise is limited to the purchase price of the material. No use of any patent owned by anyone is not to be inferred from any statement contained herein. WITH REGARD TO THE MATERIAL, MAKES NO WARRANTY OF ANY KIND WHATEVER, EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED BY SELLER.

7/13/83

SIGNATURE:

WILLIAM M. BALL, III

TITLE:

MANAGER OF TECHNICAL SERVICES

the HILL and GRIFFITH Company

1262 State Avenue
Cincinnati, Ohio 45204

2931 Seventh Avenue - North
Birmingham, Alabama 35202

4606-10 West 16th Street
Chicago, Illinois 60650

Depot Street
Burbank, Ohio 44214

HANDLING

1. Harmful if ingested.
2. Avoid formation of dust clouds in use or storage areas.
3. High concentrations of dust may be subject to explosion if exposed to sparks, open flame, or heated pipes.
4. Should product be involved with fire — use Foam, Carbon Dioxide, or dry chemical.*
5. Incomplete combustion could yield Carbon Monoxide.

*When using any type of extinguisher — stand back at least 10 feet from fire and do not apply with force to form dust clouds.

HG 176

SLIK BOX

FIRST AID

1. If ingested—induce vomiting—call Physician.
2. Eye contact—flush with water—call Physician.
3. Prolonged inhalation of fumes—remove victim to fresh air—call Physician.
4. Soap & water wash after skin contact to avoid possible skin dermatitis.

FOR INDUSTRIAL USE ONLY

Serving the CAST METAL INDUSTRY Since 1896

TOXIC DEGREE (LEVEL OF PRODUCT):

UNK

IRRITANT-SKIN, EYE, RESPIRATORY

Possible eye, skin & respiratory

PRINCIPAL
ROUTES OF
ABSORPTION

NAME ROUTE

NAME TOXIC INGREDIENTS

Inhalation

Possible fumes from acrylic resin

POSSIBLE SYMPTOMS OF OVEREXPOSURE: (CHEMICAL NAME AND CORRESPONDING SYMPTOMS)

Harmful if ingested

CHRONIC EFFECTS:

UNK

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation: Remove from exposure area to fresh air. Ingestion: Call physician.

Skin Contact: Soap and water wash

Other:

Eye Contact: Flush with copious quantities of water - call physician

SECTION 6 - REACTIVITY DATA

STABILITY (CHECK ONE) CONDITIONS TO AVOID:

Stable ☒

Unstable

INCOMPATIBILITY (MATERIALS TO AVOID):

In case of fire in or near storage area steam generation is possible.

HAZARDOUS DECOMPOSITION PRODUCTS:

UNK - Incomplete combustion might yield carbon monoxide.

HAZARDOUS POLYMERIZATION (CHECK ONE):

CONDITIONS TO AVOID:

Will Not Occur ☒

Might Occur

SECTION 7 - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Product is shipped in plastic form. If spill occurs in use form (cut back with water to slurry form) dike spill area with inert material such as sand.

WASTE DISPOSAL METHOD:

Remove waste collection to approved land fill.

SECTION 8 - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS:

Local Exhaust Recommended.

Mechanical Exhaust Recommended for pouroff & shake out

Special

Other Protective Equipment None required.

PROTECTIVE EQUIPMENT (SPECIFY TYPES):

Eye Safety goggles or face shield

Gloves Rubber or neoprene recommended.

Respiratory NIOSH approved in pouroff & shake out areas

SECTION 9 - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Maintain storage area above freezing.

OTHER PRECAUTIONS:

None required.

OBSOLETE

The information contained herein is correct to the best of our knowledge. The recommendations or suggestions contained in this data sheet are made without guarantee or representation as to results. We suggest that you evaluate these recommendations and suggestions in your own laboratory use. Our responsibility for claims arising from breach of warranty, negligence, or otherwise is limited to the purchase price of the material. We make no warranty of any kind whatever, express or implied, and all implied warranties of merchantability and fitness for a particular purpose are hereby disclaimed by seller.

DATE:

SIGNATURE:

TITLE:

1/22/81

Manager of Technical Services

MATERIAL SAFETY DATA SHEET

(Approved by U. S. Department of Labor. "Essentially Similar" to Form LSB-00S-4)

m FMAG-72-1

FOR METAL CASTING SUPPLIES

N/A - Not applicable

UNK - Unknown

SECTION 1 - SOURCE AND NOMENCLATURE

MANUFACTURER'S NAME The Hill and Griffith Company		EMERGENCY TELEPHONE NO. Area Code 513 Number 921-1075	
ADDRESS (NUMBER, STREET, CITY, STATE, ZIP CODE) 262 State Avenue, Cincinnati, Ohio 45204		CODE NO., TRADE NAME, SYNONYMS Zircon #1 Core & Mold Wash	
CHEMICAL NAME AND SYNONYMS Putty type, proprietary - Zirconium Silicate, Clay, Acrylic Resin Methyl Carbitol, wetting and anti-foam agents & water		CHEMICAL FAMILY MOLECULAR FORMULA Complex	
ENDED USES (CHECK APPROPRIATE ONES):			

Binders (Curing)

Binders (Non-Curing)

Additives

Partings

Facings

Metal Additives

Castables and Exothermics

Others Refractory Coating

SECTION 2 - HAZARDOUS INGREDIENTS

SERIAL OR INGREDIENT IN PRODUCT: (AS IN CONTAINER BEFORE USE):	ESTABLISHED OSHA STANDARD TLV (UNITS) ETC.	LD ₅₀		LC ₅₀	SPECIES TESTED
		ORAL	SKIN	INHALATION	
Product shipped in plastic or putty form. After use will be converted to dry powder form. Consider refractories in same classification as nuisance dust.	10mg/M ³				

REMARKS: (CAN BE USED TO STATE THAT ENTIRE PRODUCT IS NON-HAZARDOUS BY OSHA DEFINITION):

SECTION 3 - PHYSICAL DATA

Boiling Point (°F.)	212°F	OR INGREDIENT (NAME)	Vapor Pressure (mmHg)	N/A
Boiling Point (°F.) (Give Method)		32°F - Water	Vapor Density (Air = 1)	N/A
Specific Gravity (Water = 1)	> 1		Evaporation Rate (= 1)	N/A
Solubility in Water (Product)	100% water miscible		Volatile % Vol.	% Wt.
Appearance (Product)	White/soft putty		Negligible @ 70°F	
Odor (Product)	Earthy/sweet		Other:	

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point	N/A °F. °C.	FLAMMABLE EXPLOSIVE LIMITS	LOWER	UPPER
Extinguishing Media:	None required in existing form.	Name: Entire product	UNK	UNK
FIRE FIGHTING PROCEDURES:				
None required in existing form.				
FIRE AND EXPLOSION HAZARDS:				
None required in existing form.				

FOR REFERENCE ONLY

UNK

Possible eye, skin & respiratory

PRINCIPAL ROUTES OF ABSORPTION	NAME ROUTE	NAME TOXIC INGREDIENTS
	Inhalation	Possible fumes from acrylic resin

POSSIBLE SYMPTOMS OF OVEREXPOSURE: (CHEMICAL NAME AND CORRESPONDING SYMPTOMS)

Harmful if ingested

CHRONIC EFFECTS:

UNK

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation: Remove from exposure area to fresh air. Ingestion: Call physician.
Skin Contact: Soap and water wash. Other:
Eye Contact: Flush with copious quantities of water - call physician

SECTION 6 - REACTIVITY DATA

STABILITY (CHECK ONE) CONDITIONS TO AVOID:

Stable ☒

Unstable

INCOMPATIBILITY (MATERIALS TO AVOID):

In case of fire in or near storage area steam generation is possible.

HAZARDOUS DECOMPOSITION PRODUCTS:

UNK - Incomplete combustion might yield carbon monoxide.

HAZARDOUS POLYMERIZATION (CHECK ONE):

CONDITIONS TO AVOID:

Will Not Occur ☒

Might Occur

SECTION 7 - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Product is shipped in plastic form. If spill occurs in use form (cut back with water to slurry form) dike spill area with inert material such as sand.

WASTE DISPOSAL METHOD:

Remove waste collection to approved land fill.

SECTION 8 - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS:

Local Exhaust Recommended.

Mechanical Exhaust Recommended for pouroff & shake out areas.

Respiratory None required.

PROTECTIVE EQUIPMENT (SPECIFY TYPES):

Eye Safety goggles or face shield

Gloves Rubber or neoprene recommended.

Respiratory NIOSH approved in pouroff & shake out areas.

SECTION 9 - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Maintain storage area above freezing.

OTHER PRECAUTIONS:

None required.

FOR REFERENCE ONLY

OBSOLETE

The information contained herein is correct to the best of our knowledge. The recommendations or suggestions contained in this data sheet are made without guarantee or representation as to results. We suggest that you evaluate these recommendations and suggestions in your own laboratory use. Our responsibility for claims arising from breach of warranty, negligence, or otherwise is limited to the purchase price of the material. Freedom to use any patent owned by anyone is not to be inferred from any statement contained herein. WITH REGARD TO THE MATERIAL, THE SELLER MAKES NO WARRANTY OF ANY KIND WHATEVER, EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED BY SELLER.

DATE:

5/28/85

SIGNATURE:

Victor S. LaFay

TITLE:

STAFF CHEMIST

MATERIAL SAFETY DATA SHEET

OBSELETE

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

N.A. = NOT APPLICABLE

N.E. = NOT ESTABLISHED

I. PRODUCT IDENTIFICATION

PRODUCT NAME (s): #1 Zircon Core & Mold Wash

Manufacturer: Hill and Griffith Co.
Address: 1262 State Avenue
Cincinnati, Ohio 45204

TELEPHONE: (800) 543-0425
Hours: 8:00 A.M. - 5:00 P.M.
Fax: 513-921-9180

II. HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

CATEGORY	RATING	LEGEND
Flammability	0	0=Minimal Hazard
Health	1	1=Slight Hazard
Reactivity	0	0=Minimal Hazard
Personal Protection	B	B=Glasses and Gloves

III. HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	CAS. NO	ACGIH THRESHOLD LIMIT VALUE	% RANGE	OSHA PERMISSABLE EXPOSURE LIMIT
Zircon	7440-67-2	5 mg/m3	70-80	5 mg/m3

* As respirable dust

@ This material contains Silicon Dioxide in some form. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to Humans (Volume 42, 1987) concludes that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals, and that there is limited evidence of the carcinogenicity of crystalline silica to humans.

Classified by the IARC as 2A

PRINTED IN U.S.A.

FOR CHEMICAL EMERGENCY, SPILL,
LEAK, EXPOSURE OR ACCIDENT CALL
CHEMTREC DAY OR NIGHT AT
1-800-424-9300

=====

IV. PHYSICAL/CHEMICAL PROPERTIES

=====

Appearance and Odor: White-soft putty. Earthy-sweet smell.

Water Solubility: 100% misc.

Melting Point(oF): 32

Boiling Range(oF): 212

Specific Gravity(water=1): >1

Vapor Pressure(mmHg): na

Percent Volatile By Weight: neg

Vapor Density(Air=1): na

Evaporation Rate(Butyl Acetate=1): na

TPQ: na

RQ: na

=====

V. FIRE AND EXPLOSION INFORMATION

=====

Flash Point(C.O.C.)(oF): na

Auto-Ignition Temperature(oF): na

Flammable Limits: LEL na UEL na

Extinguishing Media: Product is considered non combustibile.

Unusual Fire or Explosion Hazards: None

Special Fire-Fighting Procedures: Use full facepiece with self contained breathing apparatus when fighting fires near this product

=====

VI. CHEMICAL REACTIVITY INFORMATION

=====

Conditions Contributing to Instability: None.

Incompatible Materials: N.E.

Conditions to Avoid: Storage in extreme cold.

Hazardous Decomposition Products: Carbon monoxide and water vapor. May produce oxides of sulfur & nitrogen.

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=====

VII. HEALTH HAZARDS A. Summary/Risks

Signs and Symptoms of Overexposure: Overexposure to the skin could result in minor skin irritations including redness or itching.

Medical Conditions Generally Aggravated by Exposure: May aggravate pre-existing medical conditions

Primary Route(s) of Entry: Skin Contact.

Target Organs: Eyes and Skin.

Acute Health Effect: Overexposure could result in mild skin irritations that are reversible.

Chronic Health Effect: e

Carcinogenicity: This product is not considered a carcinogen by the ACGIH, NTP, IARC, or OSHA.

Notes to Physician: None.

=====

VII. HEALTH HAZARDS B. FIRST AID/EMERGENCY PROCEDURES

Inhalation: If overcome, immediately remove from exposure and seek medical attention

Skin Contact/Absorption: Wash skin thoroughly with soap and water. If irritation develops, seek medical attention

Eye Contact: Flush with clear flowing water for at least 15 minutes. If irritation persists, seek medical attention.

Ingestion: If ingested, DO NOT induce vomiting; call a physician immediately.

=====

VIII. SPILL, LEAK AND WASTE DISPOSAL PROCEDURES

Procedures for clean-up of spills/leaks: on as possible. Scoop up or clean up using best means possible. Water may be used to clean area. Notify proper authorities if the need exists.

Contain spill

Waste Disposal: Waste generated during application, demolition, breakage or spillage are not hazardous wastes as defined by RCRA (40 CFR part 261).

Place waste and spillage in closed containers. Dispose of in approved landfill in accordance with federal, state and local regulations.

IX. PROTECTION AND CONTROL INFORMATION

Hygeinic Practices: Minimize breathing vapors; mists, fumes or dusts. Avoid prolonged or repeated contact with skin. Remove contaminated clothes launder before reuse. Remove contaminated shoes; clean before reuse.

Ventilation Requirements: Provide ventilation sufficient to prevent exceeding recommended exposure limits.

Respiratory Protection: Use NIOSH approved organic cartridge Type 7 respirator

Eye Protection: Use safety glasses, splash goggles or face shield when eye contact may occur

Protective Gloves: Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact

Other Clothing and Equipment: As required to prevent contact

Engineering Controls/Work Practices: Keep containers and storage containers closed when not in use.

Special Considerations for Repair/Maintenance of Contaminated Equipment: Provide adequate respiratory, eye and skin protection.

X. PRECAUTIONS FOR SAFE HANDLING AND USE

Storage Segregation: Always segregate materials by major hazard class.

Special Handling/Storage: Do not transfer contents to unlabeled container(s).

Other: Comply with all federal, state and local regulations.

XI. DOT SHIPPING REQUIREMENTS

Shipping Name: Paint Compounds

Hazard Class: None.

Identification Number: None

Label(s) Required: None.

Date Prepared: 04-16-1990

Prepared by: Steve Neltner

Title : Lab Manager

As of the date of preparation of this document, the forgoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

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Hill and Griffith Company Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

N.A. = NOT APPLICABLE

N.E. = NOT ESTABLISHED

I. PRODUCT IDENTIFICATION

PRODUCT NAME (s): Zircon #1 Core Wash

Manufacturer: The Hill & Griffith Co.
Address: 1085 Summer Street
Cincinnati, Ohio 45204
Telephone: (513) 921-1075

Fax: (513) 921-9180

EMERGENCY

TELEPHONE: (800) 424-9300
Call Chemtrec

II. HAZARDOUS MATERIAL IDENTIFICATION SYSTEM *

CATEGORY	RATING	LEGEND
Flammability	0	0=Minimal Hazard
Health	1	1=Slight Hazard
Reactivity	0	0=Minimal Hazard
Personal Protection	B	B=Glasses and Gloves

- These ratings are based on NFPA regulations

III. HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	CAS.NO.	ACGIH THRESHOLD LIMIT VALUE	% RANGE	OSHA PERMISSIBLE EXPOSURE LIMIT
Zircon	7440-67-7	5 mg/m ³	70-80	5 mg/m ³
Inert Nuisance Dusts	Mixture	10 mg/m ³	1-5	15 mg/m ³

- As respirable dust

This material contains crystalline silica. The International Agency for Research on Cancer (IARC) Monograph Silica, Some Silicates and Organic Fibres (Volume 68, 1997) has determined that crystalline silica in the form of quartz or cristobalite from occupational exposures, if inhaled, is carcinogenic to humans (IARC Group 1). Prolonged inhalation of silica dust may result in silicosis, a progressive, disabling, and sometimes fatal, lung disease. Avoid creating dusty conditions and use a NIOSH/MSHA approved dust respirator when Threshold limit Values (TLVs) may be exceeded.

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IV. PHYSICAL/CHEMICAL PROPERTIES

Appearance and Odor: White thick paste, low odor.

Water Solubility: Miscible.

Melting Point(°F): 32

Boiling Range(°F): 212

Specific Gravity(water=1): > 1

Vapor Pressure(mmHg): 760

Percent Volatile By Weight: NE

Vapor Density(Air=1): NE
TPQ: NA

Evaporation Rate(Butyl Acetate=1): < 1
RQ: NA

V. FIRE AND EXPLOSION INFORMATION

Flash Point(C.O.C.)(°F): NA

Auto-Ignition Temperature(°F): NA

Flammable Limits: LEL: NA UEL: NA

Extinguishing Media: Not applicable.

Unusual Fire or Explosion Hazards: None.

Special Fire-Fighting Procedures: Use full facepiece with self-contained breathing apparatus when fighting fires near this product.

VI. CHEMICAL REACTIVITY INFORMATION

Conditions Contributing to Instability: None.

Incompatible Materials: Strong acids or oxidizers.

Conditions to Avoid: None.

Hazardous Decomposition Products: Possible dusts could be generated, but not likely.

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VII. HEALTH HAZARDS A. Summary/Risks

Signs and Symptoms of Overexposure: Eyes- irritation with redness and swelling; Skin- may irritate; Inhalation- may cause coughing and sneezing.

Medical Conditions Generally Aggravated by Exposure: May aggravate pre-existing medical conditions.

Primary Route(s) of Entry: Inhalation, skin contact, and ingestion.

Target Organs: Eyes, lungs, and skin.

Acute Health Effect: Overexposure could lead to skin irritations and lung or mucous membrane irritation.

Chronic Health Effect: Overexposure could lead to severe damage to skin, eyes, lungs, or mucous membranes.

Carcinogenicity: See page 1. In the report the National Toxicology Program (NTP) classified respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, as *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a casual relationship between exposure to respirable crystalline silica dust. In addition, the American Conference of Governmental Industrial Hygienists (ACGIH) has classified crystalline silica-quartz as an A2 *Suspected Human Carcinogen*.

Notes to Physician: None.

VII. HEALTH HAZARDS B. First Aid/Emergency Procedures

Inhalation: If overcome, immediately remove from exposure and seek medical attention.

Skin Contact/Absorption: Wash skin thoroughly with soap and water. If irritation develops, seek medical attention.

Eye Contact: Flush with clear flowing water for at least 15 minutes. If irritation persists, seek medical attention.

Ingestion: If ingested, DO NOT induce vomiting; call a physician immediately.

VIII. SPILL, LEAK AND WASTE DISPOSAL PROCEDURES

Procedures for clean-up of spills/leaks: Stop spill as soon as possible. Scoop up or clean up using best means possible. Water may be used to clean area. Notify proper authorities if the need exists.

Waste Disposal: Waste generated during application, demolition, breakage or spillage may be hazardous wastes as defined by RCRA (40 CFR part 261). Place waste and spillage in closed containers. Dispose of in approved landfill in accordance with federal, state and local regulations.

PRINTED IN THE U.S.A.

IX. PROTECTION AND CONTROL INFORMATION

Hygienic Practices: Minimize breathing vapors, mists, fumes or dusts. Avoid prolonged or repeated contact with skin. Remove contaminated clothes, launder before reuse. Remove contaminated shoes; clean before reuse.

Ventilation Requirements: Provide ventilation sufficient to prevent exceeding recommended exposure limits.

Respiratory Protection: Use NIOSH approved fine particulate respirator if permissible exposure limits or threshold limit values are exceeded or if the user deems necessary.

Eye Protection: Use safety glasses, splash goggles, or face shield when eye contact may occur.

Protective Gloves: Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

Other Clothing and Equipment: As required to prevent contact.

Engineering Controls/Work Practices: Keep containers and storage containers closed when not in use.

Special Considerations for Repair/Maintenance of Contaminated Equipment: Provide adequate respiratory, eye and skin protection.

X. PRECAUTIONS FOR SAFE HANDLING AND USE

Storage Segregation: Always segregate materials by major hazard class.

Special Handling/Storage: Do not transfer contents to unlabeled container(s).

Other: Comply with all federal, state and local regulations.

XI. DOT SHIPPING REQUIREMENTS

Shipping Name(s): Any Packaging

Compound, Thermal Insulating

Date Prepared: 05/08/01

Supersedes: 11/25/97

Print Date: 05/08/01

Prepared by: Lori R. Yeager

Title: Corporate Government Regulatory Manager

As of the date of preparation of this document, the forgoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

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the HILL and GRIFFITH Company

1262 State Avenue
Cincinnati, Ohio 45204

2931 Seventh Avenue - North
Birmingham, Alabama 35202

4606-10 West 16th Street
Chicago, Illinois 60650

Depot Street
Burbank, Ohio 44214

HANDLING

1. Harmful if ingested.
2. Protect product from freezing.
3. Should product be involved with fire — in-complete combustion could yield Carbon Monoxide and fumes of Petroleum Resin.

#1 ZIRCON

CORE and MOLD WASH

FIRST AID

1. If ingested — call Physician — Do Not induce vomiting.
2. Eye contact—flush with water—call Physician.
3. Prolonged inhalation of fumes from fire — remove victim to fresh air — call Physician.
4. Soap & water wash after skin contact.

HG 168

FOR INDUSTRIAL USE ONLY

Serving the CAST METAL INDUSTRY Since 1896



HILL and GRIFFITH Company

Quality and Service Since 1898



MADE IN USA

FIRE	0
HEALTH	2
REACTIVITY	0
PERSONAL PROTECTION	B

S-ZIRCON CORE WASH #1

**CAUTION: KEEP FROM FREEZING
FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN**

PART NUMBER

9587

LOT #

NET: 65 LBS.

SHIPPING NAME:
COMPOUND, THERMAL INSULATING

WARNING STATEMENTS

DANGER: HARMFUL IF SWALLOWED. MAY CAUSE IRRITATION IN SUSCEPTIBLE INDIVIDUALS. IRRITATION OF SKIN, EYES, NOZODUS REMEDIATION CAN RESULT FROM CONTACT WITH THIS PRODUCT. THIS MATERIAL CONTAINS FREE CRYSTALLINE SILICA. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPH "SILICA, SOME SILICATES AND ORGANIC SILICATES" (VOL. 26, 1977) HAS DETERMINED THAT CRYSTALLINE SILICA IN THE FORM OF QUARTZ OR CRYSTOALLITE FROM OCCUPATIONAL EXPOSURES. IF INHALED, IT PARTICIPATES IN HUMAN (GROUP 1). PROLONGED INHALATION OF SILICA DUST MAY RESULT IN SILICOSIS, A PROGRESSIVE, DEABLING, AND SOMETIMES FATAL LUNG DISEASE. AVOID CREATING DUSTY CONDITIONS AND USE A NUOSHIMWA APPROVED DUST RESPIRATOR WHEN THRESHOLD LIMIT VALUES (TLV) ARE EXCEEDED.

FIRST AID: (EYES) - FLUSH WITH CUPIOUS AMOUNTS OF WATER FOR 15 MINUTES. (SKIN) - WASH WITH CUPIOUS AMOUNTS OF WATER FOR 15 MINUTES. (INGESTION) - DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY. (INHALATION) - REMOVE TO FRESH AIR. ADMINISTER OXYGEN IF BREATHING IS DIFFICULT. IN ALL CASES ABOVE, IF PROBLEM PERSISTS SEEK MEDICAL ATTENTION.

HANDLING: WASH THOROUGHLY AFTER HANDLING. AVOID CONTACT WITH EYES OR PROLONGED SKIN CONTACT. STORE AWAY FROM HEAT SOURCES, PREFERABLY AT ROOM TEMPERATURE. DO NOT TRANSFER TO UNMARKED CONTAINERS. DO NOT PRESSURIZE OR REUSE THIS CONTAINER. SAFETY GLASSES AND GLOVES ARE RECOMMENDED WHEN HANDLING THIS PRODUCT. READ PRODUCT LITERATURE AND MATERIAL SAFETY DATA SHEET BEFORE USE.

DISPOSAL: SMALL SPILLS CAN BE COLLECTED BY SCOOPING UP AND WASHING CONTAMINATED AREA WITH SOAP AND WATER. LARGE SPILLS SHOULD BE CONTAINED AND KEPT OUT OF SEWERS, DRAINS AND WATER SOURCES. CLEAN UP BY SHOVEL AND WASH AREA WITH SOAP AND WATER. NOTIFY PROPER AUTHORITIES IF THE NEED EXISTS.

HAZARDOUS INGREDIENTS AND CAS NUMBERS

7440-67-7

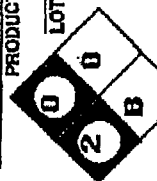
SILICON
AS RESPIRABLE DUST



9587

S-ZIRCON CORE WASH #1
PRODUCT

LOT NO.



3637 Farnsworth Avenue • Indianapolis, IN 46241 • Sales Central-Cincinnati 1-800-543-0425 • Sales Central-Indianapolis 1-800-428-3102



Hill and Griffith Company Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

N.A. = NOT APPLICABLE

N.E. = NOT ESTABLISHED

I. PRODUCT IDENTIFICATION

PRODUCT NAME (s): Concote™ 405

Manufacturer: The Hill & Griffith Co.
Address: 1085 Summer Street
Cincinnati, Ohio 45204
Telephone: (513) 921-1075

Fax: (513) 921-9180

EMERGENCY

TELEPHONE: (800) 424-9300
Call Chemtrec

II. HAZARDOUS MATERIAL IDENTIFICATION SYSTEM *

CATEGORY	RATING	LEGEND
Flammability	0	0=Minimal Hazard
Health	2	2=Moderate Hazard
Reactivity	0	0=Minimal Hazard
Personal Protection	A	A=Safety Glasses

* These ratings are based on NFPA regulations

III. HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	CAS.NO.	ACGIH THRESHOLD LIMIT VALUE	% RANGE	OSHA PERMISSIBLE EXPOSURE LIMIT
Olivine	1317-71-1	10 mg/m ³	60-70	5 mg/m ³
Bentonite	1302-78-9		0-10	
Quartz	14808-60-7			
Respirable Quartz (<1-2%)		0.05 mg/m ³		0.05 mg/m ³
Nuisance Dust		10 mg/m ³		5 mg/m ³ *
				5 mg/m ³ **

* Total Dust ** Respirable Fraction

This material contains crystalline silica. The International Agency for Research on Cancer (IARC) Monograph Silica, Some Silicates and Organic Fibres (Volume 68, 1997) has determined that crystalline silica in the form of quartz or cristobalite from occupational exposures, if inhaled, is carcinogenic to humans (IARC Group 1). Prolonged inhalation of silica dust may result in silicosis, a progressive, disabling, and sometimes fatal, lung disease. Avoid creating dusty conditions and use a NIOSH/MSHA approved dust respirator when Threshold limit Values (TLVs) may be exceeded.

This material contains olivine, which contains small amounts of nickel and chromium compounds. Nickel compounds are classified by IARC as "carcinogenic to humans" (Group 1) and by NTP as "reasonably anticipated to be a carcinogen." Chromium compounds are listed as "unclassifiable as to carcinogenicity in humans (Group 3) by IARC and "Not classifiable as a human carcinogen" by OSHA.

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IV. PHYSICAL/CHEMICAL PROPERTIES

Appearance and Odor: Gray slurry, no odor.

Water Solubility: Miscible.

Melting Point(°F): 32

Boiling Range(°F): 212

Specific Gravity(water=1): NE

Vapor Pressure(mmHg): 760

Percent Volatile By Weight: 35-50

Vapor Density(Air=1): NE

Evaporation Rate(Butyl Acetate=1): < 1

TPQ: NA

RQ: NA

V. FIRE AND EXPLOSION INFORMATION

Flash Point(C.O.C.)(°F): NA

Auto-Ignition Temperature(°F): NA

Flammable Limits: LEL: NA UEL: NA

Extinguishing Media: Not applicable

Unusual Fire or Explosion Hazards: High concentrations of dust in high heat environment may cause explosions.

Special Fire-Fighting Procedures: Use full facepiece with self-contained breathing apparatus when fighting fires near this product.

VI. CHEMICAL REACTIVITY INFORMATION

Conditions Contributing to Instability: High concentration of dust in a high temperature environment.

Incompatible Materials: NE

Conditions to Avoid: Dusting.

Hazardous Decomposition Products: Various oxides of carbon and hydrogen.

PRINTED IN U.S.A.

VII. HEALTH HAZARDS A. Summary/Risks

Signs and Symptoms of Overexposure: Overexposure could result in coughing, sneezing, shortness of breath, or other respiratory problems. Other symptoms may result.

Medical Conditions Generally Aggravated by Exposure: May aggravate pre-existing medical conditions.

Primary Route(s) of Entry: Inhalation.

Target Organs: Eyes, and lungs.

Acute Health Effect: Overexposure could result in temporary mucous membrane or respiratory tract irritation.

Chronic Health Effect: Overexposure could result in irreversible mucous membrane or respiratory tract damage. Symptoms include cough, shortness of breath, and reduced pulmonary function. This product contains small amounts of nickel and chromium compounds. Hexavalent chromium has not been detected in the olivine (detection limit 0.1%). Overexposure to nickel and chromium compounds may cause respiratory and skin sensitization.

Carcinogenicity: See page 1. In the report the National Toxicology Program (NTP) classified respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, as *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a casual relationship between exposure to respirable crystalline silica dust. In addition, the American Conference of Governmental Industrial Hygienists (ACGIH) has classified crystalline silica-quartz as an A2 *Suspected Human Carcinogen*. See page 1 for information on nickel and chromium compounds in the olivine. Olivine is not considered a carcinogen or suspected carcinogen by IARC, NTP, or OSHA.

Notes to Physician: None.

VII. HEALTH HAZARDS B. First Aid/Emergency Procedures

Inhalation: If overcome, immediately remove from exposure and seek medical attention.

Skin Contact/Absorption: Wash skin thoroughly with soap and water. If irritation develops, seek medical attention.

Eye Contact: Flush with clear flowing water for at least 15 minutes. If irritation persists, seek medical attention.

Ingestion: If ingested, DO NOT induce vomiting; call a physician immediately.

VIII. SPILL, LEAK AND WASTE DISPOSAL PROCEDURES

Procedures for clean up of spills/leaks: Stop spill as soon as possible. Scoop up or clean up using best means possible. Water may be used to clean area. Notify proper authorities if the need exists.

Waste Disposal: Waste generated during application, demolition, breakage or spillage may be hazardous wastes as defined by RCRA (40 CFR part 261). Place waste and spillage in closed containers. Dispose of in approved landfill in accordance with federal, state and local regulations.

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IX. PROTECTION AND CONTROL INFORMATION

Hygienic Practices: Minimize breathing vapors, mists, fumes or dusts. Avoid prolonged or repeated contact with skin. Remove contaminated clothes, launder before reuse. Remove contaminated shoes; clean before reuse.

Ventilation Requirements: Provide ventilation sufficient to prevent exceeding recommended exposure limits.

Respiratory Protection: Use NIOSH approved respirator for fine particulate filter for dusts, if Permissible Exposure Limits or Threshold Limit Values are exceeded or if the user deems necessary.

Eye Protection: Use safety glasses, splash goggles, or face shield when eye contact may occur.

Protective Gloves: Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

Other Clothing and Equipment: As required to prevent contact.

Engineering Controls/Work Practices: Keep containers and storage containers closed when not in use.

Special Considerations for Repair/Maintenance of Contaminated Equipment: Provide adequate respiratory, eye and skin protection.

X. PRECAUTIONS FOR SAFE HANDLING AND USE

Storage Segregation: Always segregate materials by major hazard class.

Special Handling/Storage: Do not transfer contents to unlabeled container(s).

Other: Comply with all federal, state and local regulations.

XI. DOT SHIPPING REQUIREMENTS

Shipping Name(s): Any Packaging

Compound, Thermal Insulating

Date Prepared: 02/11/02

Supersedes: 08/15/01

Print Date: 02/11/02

Prepared by: Lori R. Yeager

Title: Corporate Government Regulatory Specialist

As of the date of preparation of this document, the forgoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

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HILL and GRIFFITH Company

Quality and Service Since 1896



FIRE	2
HEALTH	U
REACTIVITY	U
PERSONAL PROTECTION	A

CONCOTE™ 405

**CAUTION: KEEP FROM FREEZING
FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN**

PART NUMBER

7270

LOT #

NET: 640 LBS.

WARNING STATEMENTS

DANGER:

HARMFUL IF SWALLOWED. MAY CAUSE IRRITATION IN SUSCEPTIBLE INDIVIDUALS. IRRITATION OF SKIN, EYES, MUCOUS MEMBRANES CAN RESULT FROM CONTACT WITH THIS PRODUCT. THIS MATERIAL CONTAINS FREE CRYSTALLINE SILICA. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPH "SILICA, SOME SILICATES AND ORGANIC SILICATES" (VOL. 49, 1987) HAS DETERMINED THAT CRYSTALLINE SILICA IN THE FORM OF QUARTZ OR CRYSTALLITE FROM OCCUPATIONAL EXPOSURES IF INHALED, IS CARCINOGENIC TO HUMANS (IARC GROUP 1). PROLONGED INHALATION OF SILICA DUST MAY RESULT IN SILICOSIS, A PROGRESSIVE, DISABLING, AND SOMETIMES FATAL, LUNG DISEASE. AVOID CREATING DUSTY CONDITIONS AND USE A NIOSH/MSHA APPROVED DUST RESPIRATOR WHEN THRESHOLD LIMIT VALUES (TLV) ARE EXCEEDED.

FIRST AID:

(EYES) - FLUSH WITH CUPIOUS AMOUNTS OF WATER FOR 15 MINUTES. (SKIN) - WASH WITH CUPIOUS AMOUNTS OF WATER FOR 15 MINUTES. (INGESTION) - DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY. (INHALATION) - REMOVE TO FRESH AIR. ADMINISTER OXYGEN IF BREATHING IS DIFFICULT. IN ALL CASES ABOVE, IF PROBLEM PERSISTS SEEK MEDICAL ATTENTION.

HANDLING:

WASH THOROUGHLY AFTER HANDLING. AVOID CONTACT WITH EYES OR PROLONGED SKIN CONTACT. STORE AWAY FROM HEAT SOURCES, PREFERABLY AT ROOM TEMPERATURE. DO NOT TRANSFER TO UNPACKED CONTAINERS. DO NOT PRESSURIZE OR REUSE THIS CONTAINER. SAFETY GLASSES AND GLOVES ARE RECOMMENDED WHEN HANDLING THIS PRODUCT. READ PRODUCT LITERATURE AND MATERIAL SAFETY DATA SHEET BEFORE USE.

DISPOSAL:

SMALL SPILLS CAN BE COLLECTED BY SCOOPING UP AND WASHING CONTAMINATED AREA WITH SOAP AND WATER. LARGE SPILLS SHOULD BE CONTAINED AND KEPT OUT OF SEWERS, DRAINS AND WATER SOURCES. CLEAN UP BY SHOVEL AND WASH AREA WITH SOAP AND WATER. NOTIFY PROPER AUTHORITIES IF THE NEED EXISTS.

HAZARDOUS INGREDIENTS AND CAS NUMBERS

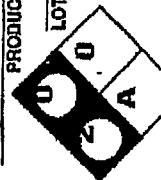
OLIVINE 1317-71-1
BENTONITE 1302-78-9
QUARTZ 14808-60-7



37278

PRODUCT

LOT NO.



3637 Farnsworth Avenue • Indianapolis, IN 46241 • Sales Central-Cincinnati 1-800-543-0425 • Sales Central-Indianapolis 1-800-428-3102

QC APPROVED

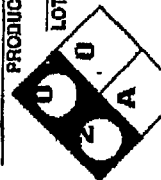
QC APPROVED

QC APPROVED

CONCOTE™ 405

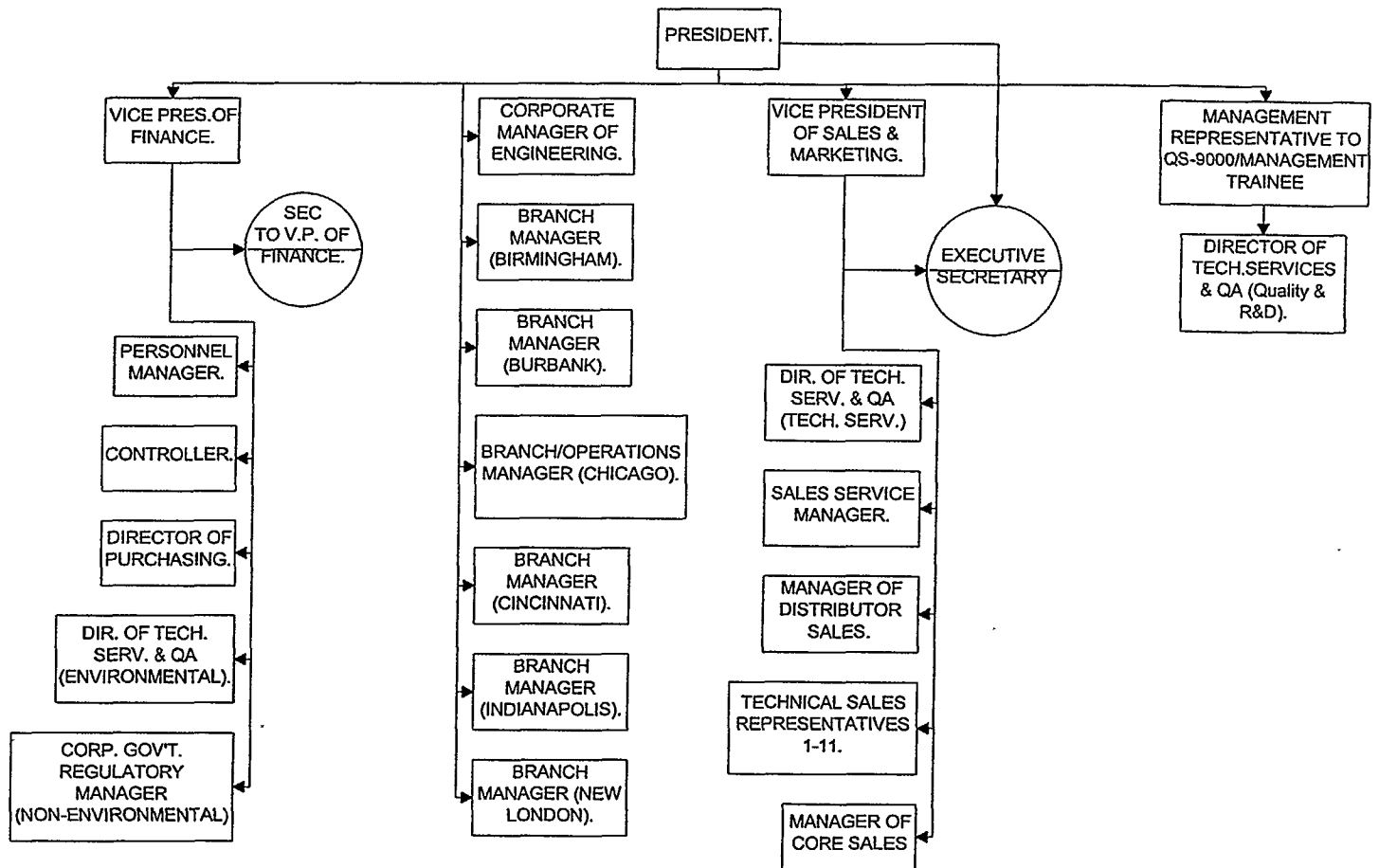
PRODUCT

LOT NO.



THE HILL AND GRIFFITH COMPANY CORPORATE ORGANIZATIONAL CHART

CORP-FLOW-00001
Revision: 4.00
Date: 1-23-98
Author: RH
Approved: GEF
P. 1 of 1



CONTROLLED



Quality and Service Since 1896

HILL and GRIFFITH Company

FIRE	4
HEALTH	1
REACTIVITY	0
PERSONAL PROTECTION	

EZ DRY PLASTIC MOLD SPRAY

DANGER

CONTAINS FLAMMABLE ALIPHATIC SOLVENTS. EMPTY CONTAINER HAS THE SAME HAZARDS AS PRODUCT IN ORIGINAL FORM. KEEP AWAY FROM HEAT, SPARKS, AND FLAME. NO SMOKING. VAPOR MAY SPREAD LONG DISTANCES. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT TRANSFER TO UNMARKED CONTAINERS. USE WITH ENOUGH VENTILATION TO KEEP VAPOR BELOW TLV. WEAR CHEMICAL GOGGLES AND RESISTANT GLOVES. CONTAINER MUST BE GROUND WHEN BEING EMPTIED. DO NOT INHALE VAPORS. DO NOT TAKE INTERNALLY. DO NOT ALLOW BODILY CONTACT. SEE MATERIAL SAFETY DATA SHEET AND YOUR SUPERVISOR FOR MORE INFORMATION CONCERNING PROPER AND SAFE HANDLING AND USE OF THE CONTENTS.

FIRST AID

EYES - FLUSH WITH COPIOUS AMOUNTS OF WATER FOR 15 MINUTES.
SKIN - WASH WITH COPIOUS AMOUNTS OF WATER FOR 15 MINUTES.
INGESTION - DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION - REMOVE TO FRESH AIR. ADMINISTER OXYGEN IF BREATHING IS DIFFICULT.
IN ALL CASES ABOVE IF PROBLEM PERSISTS SEEK MEDICAL ATTENTION.

HANDLING

KEEP CONTAINERS COOL, DRY AND AWAY FROM ALL IGNITION SOURCES SUCH AS OPEN FLAMES, SPARKS, HEAT, STATIC ELECTRICITY OR ELECTRICAL DISCHARGES. DO NOT STORE NEAR STRONG OXIDANTS. VENTILATION EQUIVALENT TO OUTDOORS IS RECOMMENDED FOR STORAGE. DO NOT TRANSFER TO UNMARKED CONTAINER. READ PRODUCT LITERATURE AND MATERIAL SAFETY DATA SHEET PRIOR TO USE.

SPILL & WASTE DISPOSAL

FOR SPILLS REMOVE ALL UNNECESSARY PERSONNEL FROM AREA. KEEP SOURCES OF IGNITION AND HOT METAL SURFACES INSULATED FROM THE SPILL. SOAK UP WITH INERT ABSORBENT MATERIAL. DO NOT USE WATER TO FLUSH THIS MATERIAL INTO RETAINING CONTAINERS. DISPOSE OF SPILLED PRODUCT AND ABSORBENT MATERIAL IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. NOTIFY PROPER AUTHORITIES IF THE NEED EXISTS. KEEP OUT OF SEWERS. WATER SOURCES AND DRAINAGE DITCHES.

HAZARDOUS INGREDIENTS

NAME	CAS #
ALIPHATIC PETROLEUM DISTILLATE	8052-41-3
GRAPHITE	7782-42-5
1-HYDROXYETHYL-2-TALL OIL	61791-39-7

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
DANGER: COMBUSTIBLE LIQUID

PART NUMBER

6159

LOT #

NET: 520 LBS.

SHIPPING NAME:
COMPOUND, THERMAL INSULATING

1262 State Avenue • Cincinnati, OH 45204 • Sales Central-Cincinnati 1-800-543-0425 • Sales Central-Indianapolis 1-800-428-3102



Quality and Service Since 1896

HILL and GRIFFITH Company

FIRE	0
HEALTH	1
REACTIVITY	0
PERSONAL PROTECTION	B

PYROSEAL CLASSIC MUDDING COMPOUND

DANGER

HAZARDOUS IF SWALLOWED. MAY CAUSE IRRITATION IN SUSCEPTIBLE INDIVIDUALS. IRRITATION OF SKIN, EYES, MUCOUS MEMBRANES CAN RESULT FROM CONTACT WITH THIS PRODUCT. THIS PRODUCT CONTAINS FREE CRYSTALLINE SILICA. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS DETERMINED THAT INHALED CRYSTALLINE SILICA IN THE FORM OF QUARTZ OR CRISTOBALITE FROM OCCUPATIONAL SOURCES IS CARCINOGENIC TO HUMANS (IARC GROUP 1). PROLONGED INHALATION OF SILICA DUST MAY RESULT IN SILICOSIS, A PROGRESSIVE, DISABLING, AND SOMETIMES FATAL, LUNG DISEASE. AVOID CREATING DUSTY CONDITIONS AND USE A MUSHMASHA APPROVED DUST RESPIRATOR WHEN THRESHOLD LIMIT VALUES (TLVs) ARE EXCEEDED.

FIRST AID

EYES - FLUSH WITH COPIOUS AMOUNTS OF WATER FOR 15 MINUTES
SKIN - WASH WITH COPIOUS AMOUNTS OF WATER FOR 15 MINUTES.
INGESTION - DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION - REMOVE TO FRESH AIR. ADMINISTER OXYGEN IF BREATHING IS DIFFICULT.
IN ALL CASES ABOVE IF PROBLEM PERSISTS SEEK MEDICAL ATTENTION.

HANDLING

WASH THOROUGHLY AFTER HANDLING. AVOID CONTACT WITH EYES OR PROLONGED SKIN CONTACT. STORE AWAY FROM HEAT SOURCES. PREFERABLY AT ROOM TEMPERATURE. DO NOT TRANSFER TO UNMARKED CONTAINERS. DO NOT PRESSURIZE OR REUSE THIS CONTAINER. SAFETY GLASSES AND GLOVES ARE RECOMMENDED WHEN HANDLING THIS PRODUCT. READ PRODUCT LITERATURE AND MATERIAL SAFETY DATA SHEET BEFORE USE.

SPILL & WASTE DISPOSAL

SMALL SPILLS CAN BE COLLECTED BY SCOPPING UP AND WASHING CONTAMINATED AREA WITH SOAP AND WATER. LARGE SPILLS SHOULD BE CONTAINED AND KEPT OUT OF SEWERS, DRAINS AND WATER SOURCES. CLEAN UP BY SHOVEL AND WASH AREA WITH SOAP AND WATER. NOTIFY PROPER AUTHORITIES IF THE NEED EXISTS.

HAZARDOUS INGREDIENTS

NAME	CAS #
KAOLIN	1332-58-7
TALC	14807-96-9
INERT NOISANCE DUSTS	MIXTURE

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
CAUTION: KEEP FROM FREEZING

PART NUMBER

6177

LOT #

NET: 700 LBS.

SHIPPING NAME:
CAULKING COMPOUND, N.O.I.

1262 State Avenue • Cincinnati, OH 45204 • Sales Central-Cincinnati 1-800-543-0425 • Sales Central-Indianapolis 1-800-428-3102



Quality and Service Since 1896

HILL and GRIFFITH Company

FIRE	1
HEALTH	2
REACTIVITY	0
PERSONAL PROTECTION	

RED CHIEF DRY CORE PASTE

DANGER

HARMFUL IF SWALLOWED. MAY CAUSE IRRITATION IN SUSCEPTIBLE INDIVIDUALS. IRRITATION OF SKIN, EYES, MUCOUS MEMBRANES CAN RESULT FROM CONTACT WITH THIS PRODUCT. THIS PRODUCT CONTAINS FREE CRYSTALLINE SILICA. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS DETERMINED THAT INHALED CRYSTALLINE SILICA IN THE FORM OF QUARTZ OR CHRISTOPHILITE FROM OCCUPATIONAL SOURCES IS CARCINOGENIC TO HUMANS (IARC GROUP 1). PROLONGED INHALATION OF SILICA DUST MAY RESULT IN SILICOSIS, A PROGRESSIVE, DISABLING, AND SOMETIMES FATAL, LUNG DISEASE. AVOID CREATING DUSTY CONDITIONS AND USE A MISHMISHA APPROVED DUST RESPIRATOR WHEN THRESHOLD LIMIT VALUES (TLVs) ARE EXCEEDED.

FIRST AID

EYES - FLUSH WITH COPIOUS AMOUNTS OF WATER FOR 15 MINUTES.
SKIN - WASH WITH COPIOUS AMOUNTS OF WATER FOR 15 MINUTES.
INGESTION - DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION - REMOVE TO FRESH AIR. ADMINISTER OXYGEN IF BREATHING IS DIFFICULT.
IN ALL CASES ABOVE IF PROBLEM PERSISTS SEEK MEDICAL ATTENTION.

HANDLING

WASH THOROUGHLY AFTER HANDLING. AVOID CONTACT WITH EYES OR PROLONGED SKIN. PREPARE AT ROOM TEMPERATURE. DO NOT TRANSFER TO UNMARKED CONTAINERS. DO NOT PRESSURIZE OR REUSE THIS CONTAINER. SAFETY GLASSES AND GLOVES ARE RECOMMENDED WHEN HANDLING THIS PRODUCT. READ PRODUCT LITERATURE AND MATERIAL SAFETY DATA SHEET BEFORE USE.

SPILL & WASTE DISPOSAL

SMALL SPILLS CAN BE COLLECTED BY SCOOPING UP AND WASHING CONTAMINATED AREA WITH SOAP AND WATER. LARGE SPILLS SHOULD BE CONTAINED AND KEPT OUT OF SEWERS, DRAINS AND WATER SOURCES. CLEAN UP BY SHOVEL AND WASH AREA WITH SOAP AND WATER. NOTIFY PROPER AUTHORITIES IF THE NEED EXISTS.

HAZARDOUS INGREDIENTS

NAME
IRON OXIDE
INERT INDISSOLUBLE DUSTS
AS RESPIRABLE DUST
CAS #
1317-60-8
MIXTURE

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN

PART NUMBER

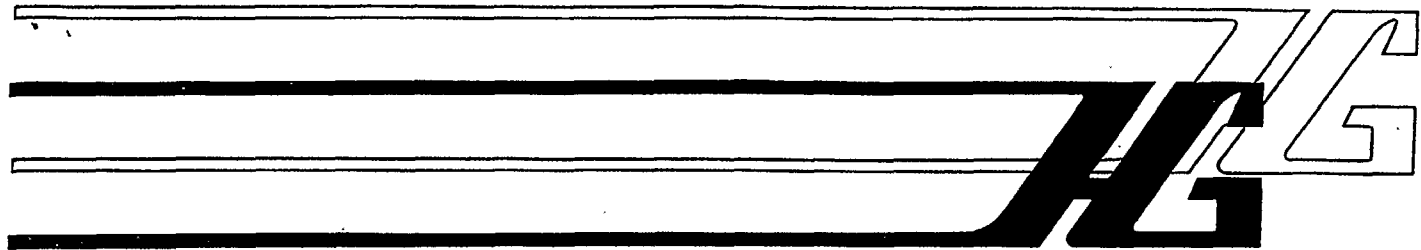
6635

LOT #

NET: 400 LBS.

SHIPPING NAME:
COMPOUND, ADHESIVE

1262 State Avenue • Cincinnati, OH 45204 • Sales Central-Cincinnati 1-800-543-0425 • Sales Central-Indianapolis 1-800-428-3102



Technical Spotlight Report

EFFECT OF TEMPERATURE TRANSFER DURING THE CASTING PROCESS . . .

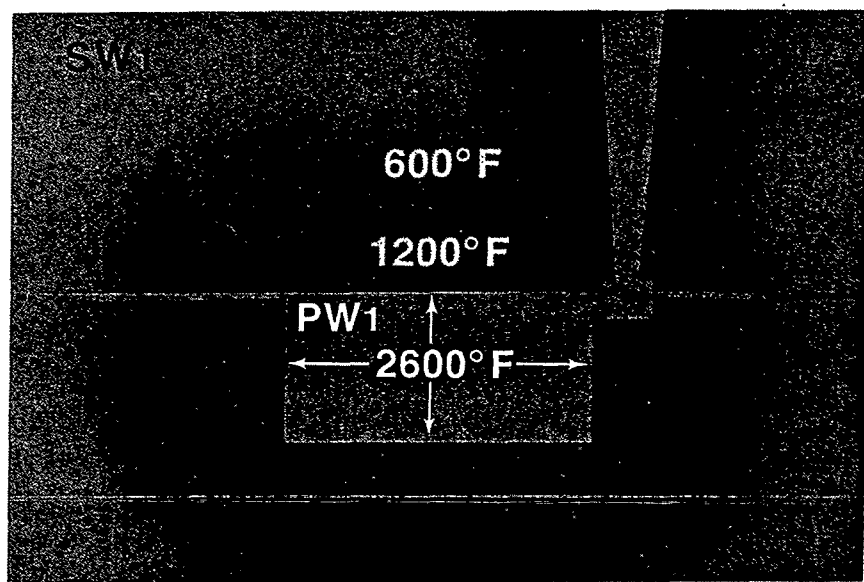


Figure 1

For foundries using individual ingredients such as Western Bentonite, Southern Bentonite, Seacoal and Cellulose, the practice has been to raise or lower one or more of these ingredients based on the type casting being produced. The rationale being, the change in size and configuration of the casting, the greater amount of burnout of one ingredient over another would result. As a consequence, daily adjustments made for each casting accounted for a constant turmoil in the molding sand.

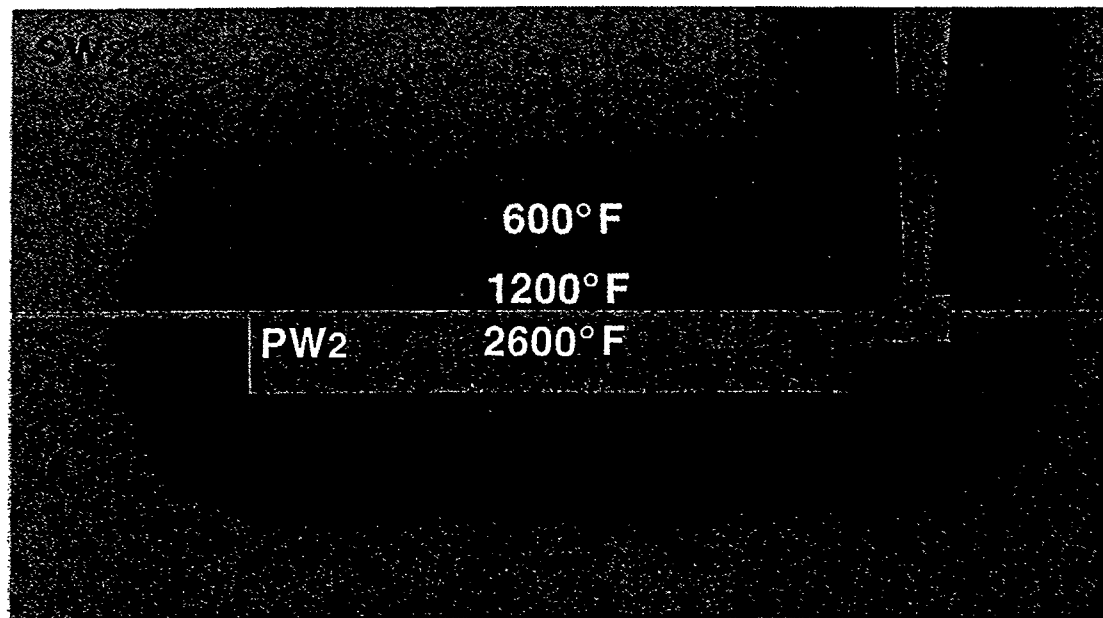


Figure 2

HOW PREMIX WORKS . . .

To completely understand what happens during each and every casting cycle in today's recirculating sand systems, consider a typical casting as shown in Figure 1. Once the mold cavity, and companion gating system is completely filled — a temperature transfer zone has already been initiated. Sand temperature at the mold/metal interface has violently been changed from ambient to approximately 2600°F — see PW1 in Figure 1 — providing the molten metal is gray, ductile, or malleable iron. At some point in time the temperature at a specific distance away from the mold/metal interface will have reached 1200°F. Again refer to PW1 in Figure 1. At this instant, let us acknowledge what has happened.

- (a) At the interface moisture in the sand has been transformed to steam. As the cavity fills with molten metal — steam can only move away from the interface into the cooler mass behind the interface. When the steam temperature reaches 212°F, it condenses to water. As additional BTU's of heat reach the condensate, water is again transformed back to steam — and again moves further back from the interface. Ultimately, the reaction, water to steam — steam to water, reaches an equilibrium temperature below 212°F to form the water layer found in all molds after pouring.
- (b) At this 1200°F temperature line, volatile vapors and gases of the coal and other carbons within this zone back to the interface have been released. All that remains of these carbonaceous materials is essentially fixed carbon and ash. At the interface, only ash residue remains. Also,
- (c) All clays present within this zone back to the interface have been calcined. That is, the water of crystallization or chemically bound water has been destroyed, reducing the clays to dead, inert, fines — no longer capable of providing an adhesive bond between sand grains.

The temperature transfer will continue to travel some distance even further away from the interface where the temperature has diminished to 600°F. Again, let us review what further changes have occurred:

- (a) The transformation of water to steam to condensate back to steam still continues as described in the previous 1200°F zone as the equilibrium temperature of 212°F has not as yet been reached.
- (b) Within this second zone bounded by the 1200°F and 600°F temperature lines — all remaining volatile matter in the carbonaceous materials has been evolved. No longer can carbon particles present in these two zones contribute to sand peel from the casting in succeeding cycles of the sand. Also,
- (c) Within this second zone, bound within the 1200°F and 600°F lines, the Southern Bentonite continues to be calcined to an inert contaminant. The Western Bentonite and Fire Clay are relatively unaffected.

The temperature transfer zone progresses until all available BTU's of heat energy liberated during solidification of the molten metal have been released and consumed by the surrounding molding sand. Hence, we can understand that the heat energy is non-selective in its destruction of any and all additives present in the molding sand.

This would indicate that a proportioned blend of the various additives would be heat destroyed in essentially a fixed ratio and indeed, this is precisely what occurs as molding sand continues to be recycled through the casting process. The term "sand to metal ratio" adequately depicts the changes in additive consumption as casting conditions change.

As pattern changes are made with a change in casting configuration and metal section, if the weight of iron required to pour the mold (PW1), Figure 1, is equal to the new pouring weight (PW2), Figure 2, and no change of sand weight in the flask, SW1 equals SW2, there has been no change in sand to metal ratio. Therefore, the weight of combined ingredients required to rebond the sand will remain unchanged.

When different patterns are used causing a change in sand to metal ratios, we must replace proportionately the clays and carbons because the molten metal is non-selective in its destruction of clays and carbons. This is accomplished by increasing or decreasing the Premix addition.



The HILL and GRIFFITH Company
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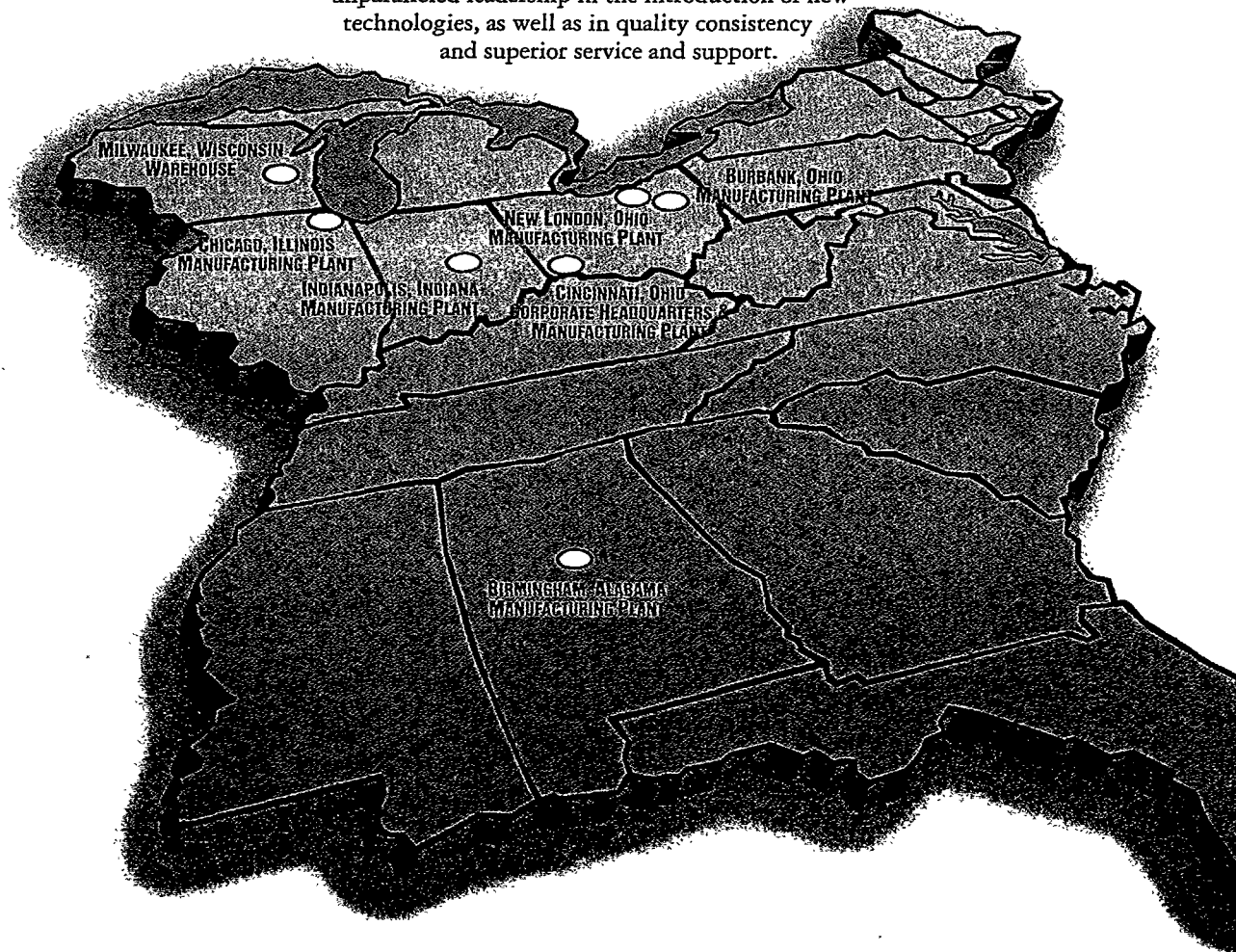


the HILL & GRIFFITH Company

SERVICES FOR THE METAL CASTING INDUSTRY

COMMITMENT TO CONTINUOUS IMPROVEMENT

From its founding in 1896, the Hill & Griffith Company has been recognized for many "firsts" it has contributed to the metal casting industry. With an ongoing investment in research and development, we have achieved unparalleled leadership in the introduction of new technologies, as well as in quality consistency and superior service and support.



NEW PRODUCT AND PROCESSES

Our research & development staff has introduced several new products and continues to be one of the sources of problem resolution for the foundry industry. In addition, our plant expansions and manufacturing upgrades have provided us the best in process capabilities to meet your casting requirements.

QUALITY PROGRAM

Our experience and the requirements of our "Hill & Griffith Quality Program" produce the industry's most consistent and highest quality products. Hill & Griffith has received substantial recognition via customer quality awards.

SPC & CERTIFICATION

Hill & Griffith utilizes state-of-the-art statistical process control measures to monitor, verify and document product quality. The automotive QS 9000 certification is scheduled for 1996.

SAND TESTING

Technicians in our lab facilities use the latest testing and documentation equipment to analyze your samples, report the results and assist you in achieving optimum performance of your processes.

TECHNICAL SERVICE

Our technical service staff utilizes degreed and foundry-trained technicians to conduct on-site assistance, process surveys, casting defect investigations, product testing, machine start-ups and much more.

WAREHOUSING FACILITIES

Hill & Griffith direct sales warehouse facilities are strategically located in Birmingham, Alabama; Burbank, Ohio; Chicago, Illinois; Cincinnati, Ohio; Indianapolis, Indiana; Milwaukee, Wisconsin, and New London, Ohio. These locations allow you to take advantage of our customized and reliable on-time delivery program.

SALES COMMITMENT

Our current staff of 11 direct sales people and 8 distributor organizations achieves complete coverage of the North American metal casting industry. You can be certain of Hill & Griffith's rapid response to meet and exceed your expectations.

RESEARCH

Hill & Griffith's aggressive, ongoing research and development effort means customers receive cost effective, innovative and environmentally sound products. Our commitment to quality and productivity is unmatched.

ELECTRONIC DATA PROCESSING

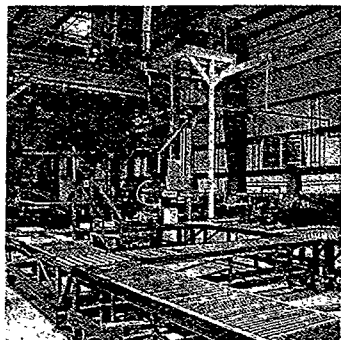
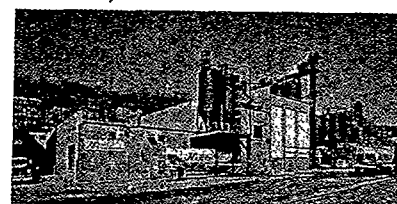
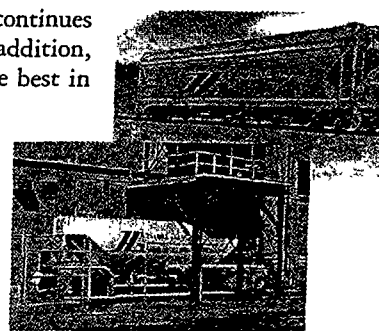
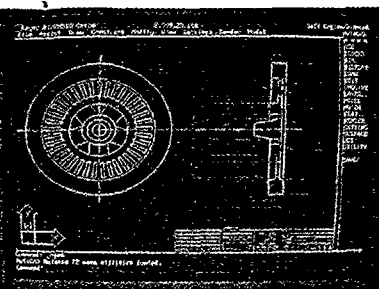
Another example of our service-oriented approach to business is our EDI system. This paperless transaction capability makes on-line reordering quick, easy and economical, and is available today from Hill & Griffith.

BAR CODING

For your convenience in monitoring inventory receipts and disbursements, we offer product and/or package bar-coding programs designed to meet your specifications.

TRAINING

Helping you succeed is our business. Our training and support programs include seminars at customer locations or at Hill & Griffith facilities, with hands-on assistance in your foundry and access to our comprehensive video library and training aids. We are always available to work with you.



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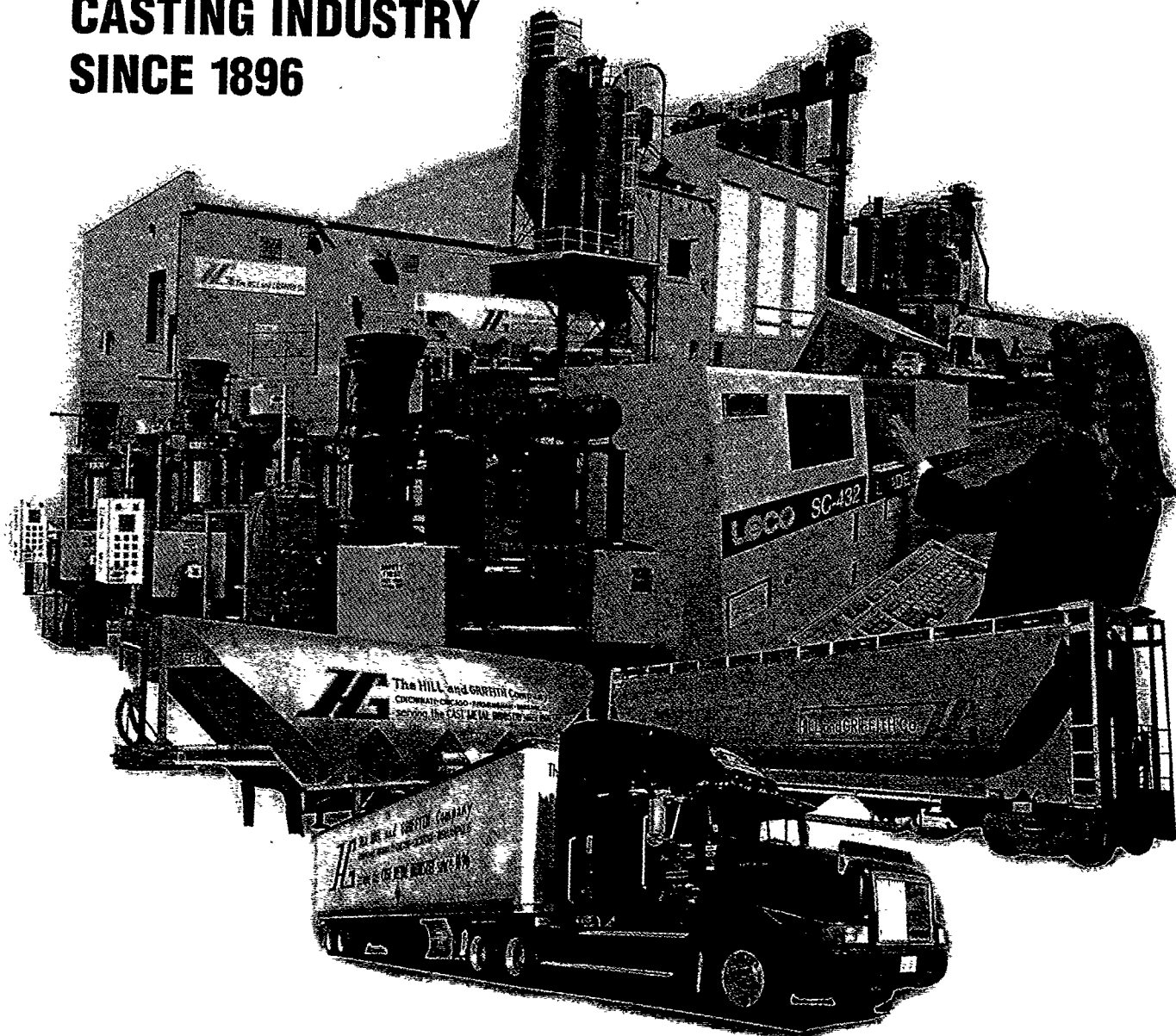
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The HILL and GRIFFITH Company

**PRODUCTS FOR THE METAL
CASTING INDUSTRY
SINCE 1896**



AN EVER EXPANDING SOURCE OF METAL



COMPANY HISTORY

The Hill and Griffith Company was founded in 1896 in Birmingham, Alabama, by John Hill. Since that beginning, Hill and Griffith has grown to six manufacturing facilities with products that have supported the growth of the foundry industry of North America.

Hill and Griffith is recognized as a quality leader in the metal casting industry. The concept of quality is not new to Hill and Griffith. John Hill stated, "Hill and Griffith feel that the integrity of the company must be represented in the products bearing our names and labels." In keeping with this tradition, Hill and Griffith's quality effort has been recognized by awards and certified supplier approvals.

To better serve the ever-changing foundry industry, The Hill and Griffith Company purchased the Gene Conrean Company in 1990. The Indianapolis-based Conrean



company was a leader in quality products for areas of the metal casting industry now served widely by Hill and Griffith.

In order to meet the future needs of the foundry industry, Hill and Griffith embarked on an expansion in the area of sand shapes. The Indianapolis facility began with oil sand shapes that included strainer cores, pouring basins and other shapes. With this success in place, the core room was expanded to include production of shell cores and rich Cold Box SCOCores. To meet increasing demand for these products,

MINERALS



The Hill and Griffith Company is a pioneer in the development of the Premix™ concept and introduced its first Premix, a combination of carbons and clays, in the early 1930s under the trade name Lavobond™. Hill and Griffith's modern blending equipment permits sand

additives to be mixed according to the customer's specific formula. This prescription blending method provides foundrymen with the ability to adjust and control additive requirements for a complete range of cast metal production.

Premix facilities located at Cincinnati and Burbank, Ohio; Chicago, Illinois; and Birmingham, Alabama are examples of Hill and Griffith's continuing effort to improve its production methods and provide better service for the members of the metal casting industry.

Although Premix formulations vary according to the type of castings being produced, the following quality ingredients can be used:

- Seacoal
- Clays
- Cereals
- Carbons
- Cellulose
- Special Additives

SAND CORES

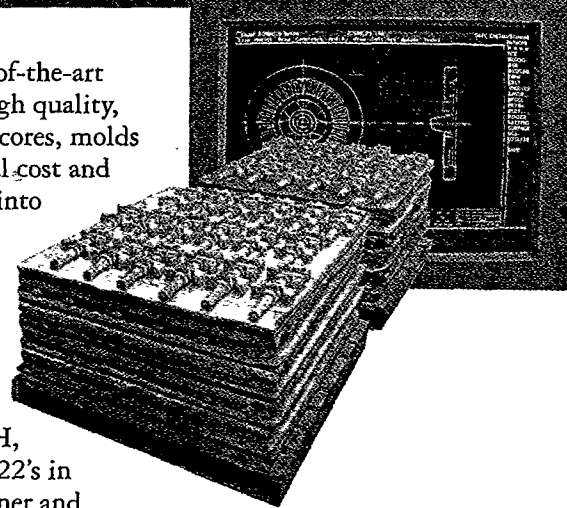
You'll benefit by utilizing our state-of-the-art facilities, specifically designed for high quality, cost effective manufacturing of sand cores, molds and strainer cores. In addition to real cost and efficiency savings, you'll be tapping into the knowledge and resources of our industry leading core making technology.

Hill and Griffith offers excellent capacity for nearly any of your requirements with Osborn Quikore 10A-2 machines in New London, OH, our newest facility, and Redford CB-22's in Indianapolis. A large variety of strainer and metallurgical cores are stocked for immediate delivery.

Sample cores are available on request. Cold box cores can be made the same day to meet your testing and pattern correction requirements. For "No Bake" process work, New London is equipped with a phenolic urethane work center where cores weighing up to 25 lbs. can be produced from conventional wooden boxes.

Capabilities include:

- Hot Box Cores
- Warm Box Cores
- "No Bake Cores"
- Cold Box Cores
- Oil Sand Cores
- Shell Cores



CASTING PRODUCTS AND TECHNOLOGY

SPECIALTY PRODUCTS

CORE AND MOLD COATINGS

Refractory coatings provide molds and cores with an impervious barrier between the sand surface and the molten metal. This ensures excellent sand peel from casting with improved casting finish.

RELEASE AGENTS AND PARTINGS

A complete line of release agents and partings include green sand liquid partings like Super Slik™ for high pressure molding, and Y-250™ Liquid Parting which is specifically produced for patterns difficult to draw. To overcome environmental and health factors where non-liquid releases are needed, Avon™ Non Silica Dry Parting is available. A complete line of Dow Corning Silicones are stocked along with COBRA™ (Cold Box Release Agents). For no bake applications, Air Set™ Release is unmatched.

AquaPart II™ - A patented, unique water-based liquid parting which provides improved odor characteristics and reduced flammability for foundry molding applications. Flammability has long been a concern in automatic molding operations, and with the water-based formula, this problem can be minimized or eliminated.

DIE AND SQUEEZE CASTING

Diluco™ - The industry's most consistent and highest quality die lubricants. Water-based formulas handle wide temperature variations and effectively control staining and soldering.

Slag Set™ Slag Conditioners - A blend of materials which improve results over the single mineral slag coagulants frequently used in the foundry industry.

Plunger Lube - A water-based plunger lubricant for cleaner, efficient cooling. An effective, economical oil-based lubricant for most operations.

PERMANENT MOLD CASTING

Concote™ - A ready to use, low pressure die casting and permanent mold coating formulated with special refractories, binders, wetting agents, and preservatives.

ADHESIVES AND MUDDING COMPOUNDS

Speed Seal™ Mold Parting Seal - A uniquely engineered sealing compound in plastic form specifically designed for use in high production molding.

Red Chief™ Core Paste - A water-based adhesive with a rapid drying characteristic when applied to warm cores or dried in a conventional oven.

Green Hornet™ - A water based adhesive that provides good strength in a relatively short period of time. The product has excellent storage life.

Shurstik™ Core Adhesives - A solvent-based product designed to meet the increasing demands for higher production rates and efficiency. The product exhibits excellent strength with short periods of set time.

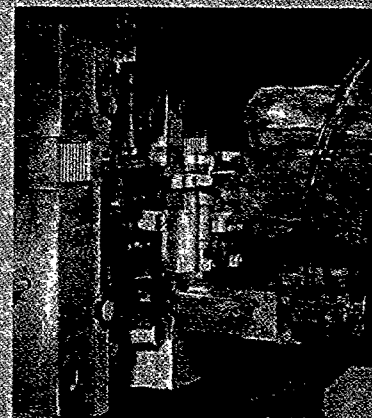
Mudding Compounds - Hill and Griffith offers two types. Compounds can be easily worked into core joints and smoothed without special tools or techniques, reducing grinding and cleaning of finished castings.

CORE OILS

Hill and Griffith offers a conventional core oil, formulated with alkyl oils, petroleum resins and drying agents, which is used in operations that require high strength and a minimum of baking time. Applied as a solventless binder, the consistency of the cores produced is very high. Applied as a solvent containing binder, the cost of the product is decreased for the user. Hill and Griffith also offers waterborne emulsified core oils for reduced hydrocarbon emissions.



Hill and Griffith opened its New London Core Facility that was designed to produce many varieties of sand shapes. The new facility has the capability of producing warm box and no bake cores (coated and uncoated). In the 1990s the foundry industry recognized a need for cores produced to specification and delivered directly to operations. With this concept in mind, the Indianapolis Facility has taken Hill and Griffith into a new dimension of the foundry industry. The benefits of direct delivery of cores include reduction of internal core scrap, optional core processes and dimension capability, just to name a few.



As an ardent supporter of the foundry industry, Hill and Griffith belongs to and is actively involved with the Ductile Iron Society, American Foundrymen's Society, Cast Metals Institute, Foundry Education Foundation, Casting Industry Suppliers Association, British Cast Iron Association and many others. Hill and Griffith's support extends to presentations at the various society events, committee participation, and several other areas that promote industry knowledge and understanding of all metal casting processes.



HILL AND GRIFFITH, WORKING FOR YOUR FUTURE

SERVICES

- Hill and Griffith's ongoing aggressive Research and Development efforts meet customers' needs for cost effective and environmentally sound products.
- Metal casting technicians are available to conduct on-site process analyses, casting defect investigations, product testing, tooling studies and much more.
- Statistical Process Control: measure, monitor, verify and document product quality.
- QS9000 Automotive Certification is scheduled for 1996.
- Hill and Griffith's sand core production plants are strategically located to provide maximum service and performance to the metal casting industry.

EVERYONE KNOWS A HIGH QUALITY PRODUCT IS THE KEY TO SUCCESS.

But in today's fast-paced, competitive climate, reliable service and timely deliveries are more important than ever. We recognize how critical convenient service and delivery are

to the success of your operations. In response, our commitment to convenience has never been higher — nor has our network of interregional resources ever been broader. In addition to our people resources, our plants are strategically located to provide optimum service benefits to the metal casting industry.

Today, you can count on our company to provide the most innovative products and services, designed for improved quality, efficiency and profits. Our "Partnership in Quality" philosophy will help you meet your most demanding requirements.

Helping you succeed is our business. Our training and support programs include seminars with hands-on assistance with your metal casting process and access to our comprehensive video library and training aids.



MINERAL PROCESSING AND WAREHOUSE LOCATIONS

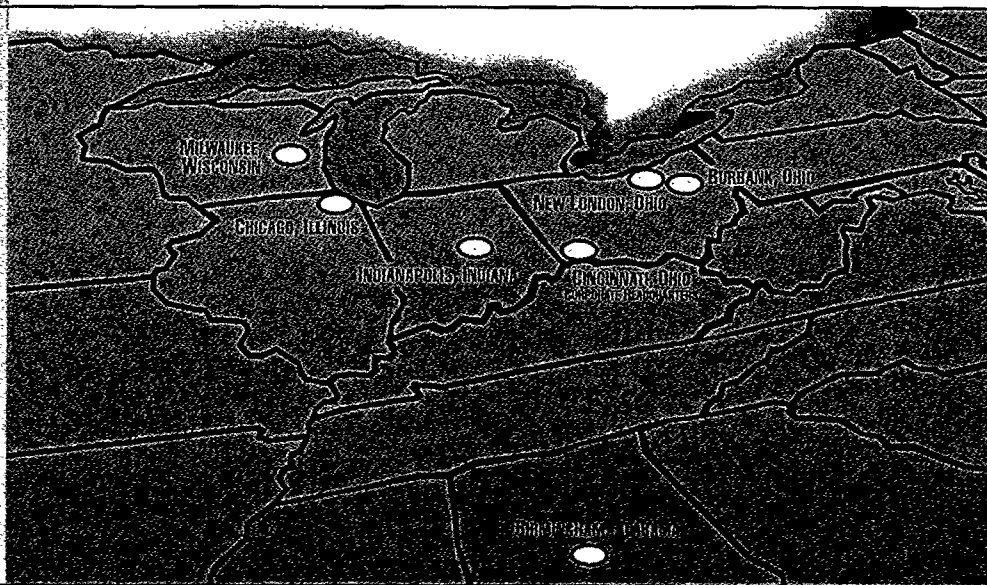
Cincinnati, Ohio
Burbank, Ohio
Chicago, Illinois
Birmingham, Alabama

CORE PLANT LOCATIONS

New London, Ohio
Indianapolis, Indiana

WAREHOUSE LOCATION

Milwaukee, Wisconsin



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