

**PLAINTIFF'S
EXHIBIT**

USG-416

FORM 1 (FEBRUARY 1964)

SWELL-WATER JOINT COMBUSTION

DATE 11/10/64

TIME 1:00 PM

CHARTER DATED

NEW

SWELL-WATER

SWELL-WATER

Swell-water to handle time up to 100,000 pounds of J1293.

<u>Formulas</u>	J1293
White castin, unrolled	6.5
Acetic Acid, 10%	0.3
Carbonic Acid	0.3
Acetic Acid, 10%	1.1
Acetic Acid, 10%	no reqd. about 0.2)
Acetic Acid, 10%	1.0
Acetic Acid, 10%	no reqd. (about 6%)
Acetic Acid, 10%	Formula V
Acetic Acid, 10%	5.0
Acetic Acid, 10%	make 100,
Acetic Acid, 10%	0.15%

Form: 0.100

Form: 0.050

Neutralizer: 0.003

Raw Materials:

Same as used in Bulletin 61-2-22.

Processing

Same as per #0035

Color

Normal color

Analysis

Normal color (Yellow & Orange) of
color of 100-000 (21-1000)

Raw Materials

Same as per #0035

Color

Normal color (Yellow & Orange) of
color of 100-000 (21-1000)

Analysis

Normal color (Yellow & Orange) of
color of 100-000 (21-1000)

NP007 1253

Operating Division PRODUCT PROCEDURE		No. 61-2-22																																																																					
Approved: <i>mgB</i>		Date 12-5-60																																																																					
		Page 1 of 16																																																																					
		Cancels Page 1																																																																					
		Dated 3-17-60																																																																					
Chamblee, Gypsum, Hagersville, New Brighton, South Gate, and Sweetwater <u>JOINT COMPOUND FORMULAS</u> <table border="0"> <tr> <td>Casein</td> <td>3.5</td> <td>Gypsum and</td> <td>7.0</td> </tr> <tr> <td>Refined Soy Protein</td> <td>4.0</td> <td>New Brighton</td> <td>-</td> </tr> <tr> <td>Ammonium Oxalate</td> <td>1.2</td> <td>J815C</td> <td>1.1</td> </tr> <tr> <td>Sodium Pentachlorophenate</td> <td>-</td> <td></td> <td>0.3</td> </tr> <tr> <td>Ammonium Pentaborate</td> <td>1.2</td> <td></td> <td>-</td> </tr> <tr> <td>Ammonium Alginate - (Note 2)</td> <td>0.3</td> <td></td> <td>0.3</td> </tr> <tr> <td>Hydrated Lime</td> <td>0-0.15</td> <td></td> <td>0.1-0.2</td> </tr> <tr> <td>Dicyandiamide</td> <td>0.5</td> <td></td> <td>1.0</td> </tr> <tr> <td>Asbestos Floats - (Note 3)</td> <td>As Req.</td> <td></td> <td>As Req'd.</td> </tr> <tr> <td>Sericite Mica - (Note 4)</td> <td>15.0</td> <td></td> <td>15.0</td> </tr> <tr> <td>Whiting - (Note 5)</td> <td>15.0</td> <td></td> <td>-</td> </tr> <tr> <td>Mica J.C. - (Note 6)</td> <td>Formula V</td> <td></td> <td>Formula V</td> </tr> <tr> <td>Mica T - (Note 6)</td> <td>-</td> <td></td> <td>To Make 100%</td> </tr> <tr> <td>Carbonate Filler - (Note 7)</td> <td>To Make 100%</td> <td></td> <td>0.100</td> </tr> <tr> <td>Sterox CD - (Note 8)</td> <td>0.100</td> <td></td> <td>0.050</td> </tr> <tr> <td>Tributylphosphate - (Note 8)</td> <td>0.050</td> <td></td> <td>0.003</td> </tr> <tr> <td>Neutralizer #5050 - (Note 8)</td> <td>0.003</td> <td></td> <td></td> </tr> </table>				Casein	3.5	Gypsum and	7.0	Refined Soy Protein	4.0	New Brighton	-	Ammonium Oxalate	1.2	J815C	1.1	Sodium Pentachlorophenate	-		0.3	Ammonium Pentaborate	1.2		-	Ammonium Alginate - (Note 2)	0.3		0.3	Hydrated Lime	0-0.15		0.1-0.2	Dicyandiamide	0.5		1.0	Asbestos Floats - (Note 3)	As Req.		As Req'd.	Sericite Mica - (Note 4)	15.0		15.0	Whiting - (Note 5)	15.0		-	Mica J.C. - (Note 6)	Formula V		Formula V	Mica T - (Note 6)	-		To Make 100%	Carbonate Filler - (Note 7)	To Make 100%		0.100	Sterox CD - (Note 8)	0.100		0.050	Tributylphosphate - (Note 8)	0.050		0.003	Neutralizer #5050 - (Note 8)	0.003		
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General Revision

01010 0322

mgB

PERF-A-TAPE JOINT COMPOUNDS

No. 61-2-22
 Date 12-5-60
 Page 2 of 16
 Cancels Page 2
 Dated 3-17-60

JOINT COMPOUNDS FORMULAS (Cont'd)

	<u>Sweetwater</u> <u>J-885G</u>	<u>Hagersville</u> <u>J-1169B</u>	<u>Chamblee</u> <u>J-1062A</u>
Casein	3.5	6.8	3.5
Refined Soy Protein	4.0	-	4.0
Ammonium Oxalate	1.2	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.2	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	0.3	0.3	0.3
Hydrated Lime	0.05-0.3	0.1-0.2	0.1-0.3
Dicyandiamide	0.5	1.0	0.5
Asbestos Floats - (Note 3)	As Req.	As Req.	As Req.
Sericite Mica - (Note 4)	15.0	-	15.0
Mica J.C. - (Note 6)	Formula V	0.8 Form V	Formula V
Talc M-4	-	15.0	-
#4 Peerless Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Sterox CD - (Note 8)	0.100	0.100	0.100
Tributylphosphate - (Note 8)	0.050	0.050	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003

FORMULA NOTES

Note 1 - J885G - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex alginate.

DP01d 0333

PRODUCT PROCEDURE	PERF-A-TAPE JOINT COMPOUND	NO. 61-1257-1 DATE 2-10-61 PAGE 1 of 1 CANCELS page 1 DATED 11-8-60
APPROVED: <i>[Signature]</i>	SWEETWATER	

Sweetwater to manufacture Perf-A-Tape Joint Compound using the J1193, Formula. Product to be shipped into the entire Sweetwater area for extensive field trials.

Formula	J1193
Fine casein, uncolled	6.5
Sodium Alginate	0.3
Boric Acid	0.3
Ammonium oxalate	1.1
Hydrated lime	As required (about 0.2)
Dicyanamide	1.0
Nicollet YTC25 asbestos	As required (about 6%)
Mica	Formula V
EM Mineralite	15.0
5050S Georgia Marble	to make 100%
Liquid mix	0.153
Sterox 0.100	
T.B.P. 0.050	
Neutralizer 5050 0.003	

Raw Materials:

Same as used in Bulletin 61-2-22.

Processing:

Same as for J035G

Color:

As per Bulletin

Final Product Tests

Consistency 55-60 cc normal 57cc at a Brabender
Reading of 400 $\pm$ 20 at 77°F
pH 8.5 - 9.5

Other modifications

As per Bulletin 61-2-22.

As per Bulletin 61-1-6.

As per Bulletin 61-15-61.

OP007 1257

SPECIAL BULLETIN

Operating Division	PERF-A-TAPE JOINT COMPOUND	No. 61-2-22-C
PRODUCT PROCEDURE	J-1214D FORMULA	Date 8-11-61
Approved: <i>mgb</i>	GYPSUM	Page 1 of 1
		Cancels
		Dated NEW

Gypsum to manufacture and ship Perf-A-Tape Joint Compound J-1214D Formula. Specifications as follows:

MANUFACTURING MILL - GypsumPRODUCT - Perf-A-Tape Joint CompoundFORMULA -

J-1214D

Casain, 100 mesh uncoiled	7.0%
Protatak A-155 Alginate	0.3
Ammonium Oxalate	1.2
Ammonium Pentaborate	1.2
Hydrated Lime	about 0.15 as req'd for normal pH
Dicyandiamide	1.0
Mica T	per Formula V
JM7RF1 Asbestos	(2:1 asbestos blend as req'd
PC7RF9	(8-9% in lab batches
Ser X	15.0
750 Marble	to make 100%

RAW MATERIALS

Protatak A-155	
Mica T	Per Bulletin 6-143-2
750 Marble	Per Bulletin 6-24-9
Other Raw Materials as shown in Bulletin 61-2-22.	

FINISHED PRODUCT TESTS

Consistency: 64-67 cc for 400-425 Brabender at 77°F.
 Application: Comparable to standard sample submitted by Research
 Other Properties: Per Bulletin 61-2-22.
 Packaging: Standard 25 lb. P-A-T Joint Compound bags except to change mixing directions to read 15 to 16 pts. of water. Also the letter "c" to follow the standard code marking on the bag to identify this formula.
 Shipment: As directed By Dept. 144.

This Bulletin expires 8-1-62.

Cancels Temporary Bulletin 61-2-22-C

Operating Division	PERF-A-TAPE JOINT COMPOUND J-1214D FORMULA	No. 61-2-22-3
PRODUCT PROCEDURE		Date 10-30-61
- Approved: <i>mgB</i>	GYPSUM	Page 1 of 1
		Cancels Dated NEW

Gypsum to manufacture and ship Perf-A-Tape Joint Compound J-1214D Formula.
Specifications as follows:

MANUFACTURING MILL - Gypsum

PRODUCT - Perf-A-Tape Joint Compound

FORMULA -

J-1214D

Casein, 100 mesh uncoiled	7.0%
Protatek A-155 Alginate	0.3
Ammonium Oxalate	1.2
Ammonium Pentaborate	1.2
Hydrated Lime	about 0.15 as req'd for normal pH
Dicyandiamide	1.0
Mica T	per Formula V
JM7RF1 Asbestos	(2:1 asbestos blend as req'd
PC7RF9	(8-9% in lab batches
Ser X	15.0
750 Marble	to make 100%
<u>Liquid Mix</u>	0.153
Sterox CD	0.1%
Tributylphosphate	0.05%
Neutralizer 5050	0.003%

RAW MATERIALS

Protatek A-155
Mica T
750 Marble
Other raw materials as shown in Bulletin 61-2-22.

Per Bulletin 6-143-2
Per Bulletin 6-24-9

FINISHED PRODUCT TESTS

Consistency: 64-67 cc for 400-425 Brabender at 77°F.
Application: Comparable to standard sample submitted by Research
Other Properties: Per Bulletin 61-2-22.
Packaging: Standard 25 lb. P-A-T Joint Compound bags except to change mixing directions to read 15 to 16 pts. of water. Also the letter "c" to follow the standard code marking on the bag to identify this formula.
Shipment: To Chicago area only - this includes the geographical area bounded by the Chicago and Lakeland Line Districts.

0007 1300

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE	PERF-A-TAPE JOINT COMPOUND FORMULA J1239A	No. 61-2-22-E Date 12-7-61 Page 1 of 2
Approved: <i>mgb</i>	DALLAS	Cancel Dated NEW

Dallas to manufacture Perf-A-Tape Joint Compound, Formula J1239A, for shipments to Kansas City as directed by Merchandising. Specifications as follows:

FORMULA

Regular fine ground un-oiled Argentine casein	4.0%
Montreal Casein Co. RH ₂ Casein	3.0
Protatek A 155 alginate	.3
Vancide 51 Z	.15
Dicyandiamide	1.0
Hydrated lime	As req'd - usually .1 to .2%
Ammonium Oxalate	1.2
Nicolet 7 T G25 Asbestos	As req'd for normal consistency (7 to 9% average)
Mica JC	per formula V
#750 Georgia Marble	40.0
Pure Cal #1	to make 100%
Liquid Mix (see Note 2)	.153

RAW MATERIALS

All are present joint cement grade materials with the addition of:

- Vancide 51 Z (R.T. Vanderbilt) per bulletin 6-100-1
- MCC-RH₂ casein - This is a fast dissolving, spray dried casein which should meet the following specifications as received at Dallas:

Moisture	-	6% maximum
Screen Test	- / 30 mesh	None
	- / 40 mesh	1% maximum
	- / 60 mesh	10% maximum
	- -100 mesh	approximately 80%

NOTE 1: Store this RH₂ casein in the driest possible location. Check moisture on a sample of this casein used each shift, and report results to J. W. Gill - Dept. 151.

Original Date of Issue 11-8-60 SPECIAL BULLETIN

1st Extension

Operating Division PRODUCT PROCEDURE	PERF-A-TAPE JOINT COMPOUND	No. 61-2-22-XX Date 12-12-61 Page 1 of 1
Approved: <i>mgB</i>	DALLAS	Cancels Page 1 Dated 2-16-61

Dallas to manufacture Perf-A-Tape Joint Compound using the J1193, Formula. Product to be shipped into the entire Sweetwater area for extensive field trials.

<u>Formula</u>	J1193
Fine casein, uncoiled	6.5
Sodium Alginate	0.3
Dovicide G	0.3
Ammonium oxalate	1.1
Hydrated lime	As required (about 0.2)
Dicyandiamide	1.0
Nicolet 7TG25 asbestos	As required (about 6%)
Mica T	Formula V
DXW Mineralite	15.0
#750S Georgia Marble	to make 100%
Liquid Mix	0.153
Sterox 0.100	
T.B.P. 0.050	
Neutralizer 5050 0.003	

Raw Materials:

Same as used in Bulletin 61-2-22.

Processing

Same as for J885G

Color

Natural White

Finished Product Tests

Consistency 65-68 cc normal 67cc at a Brabender
Reading of 400 $\pm$ 20 at 77°F

pH 8.1 - 8.5

Other specifications

As per Bulletin 61-2-22.

Coding

Per Bulletin 53-1-6.

This Bulletin expires 4-15-62

Operating Division
PRODUCT PROCEDURE

PERF-A-TAPE JOINT COMPOUNDS

No. 61-2-22
Date 4-18-62
Page 1 of 16
Cancels Page 1
Dated 12-5-60

Approved: *mgB*

MANUFACTURING PLANTS

Chamblee, Dallas, Gypsum, Hagersville, New Brighton, South Gate

JOINT COMPOUND FORMULAS

Gypsum and
New Brighton
JB15C

South Gate
J1066

Casein
Refined Soy Protein
Ammonium Oxalate
Sodium Pentachlorophenate
Ammonium Pentaborate
Ammonium Alginate - (Note 2)
Hydrated Lime
Dicyandiamide
Asbestos Floats - (Note 3)
Sericite Mica - (Note 4)
Whiting - (Note 5)
Mica J.C. - (Note 6)
Mica T - (Note 6)
Carbonate Filler - (Note 7)
Sterox CD - (Note 8)
Tributylphosphate - (Note 8)
Neutralizer #5050 - (Note 8)

3.5
4.0
1.2
-
1.2
0.3
0-0.15
0.5
As Req.
15.0
15.0
Formula V
To Make 100%

Formula V
To Make 100%
0.100
0.050
0.003

/ Indicates Change

2280 010d0

mgB

PERF-A-TAPE JOINT COMPOUNDS

No. 61-2-22
 Date 4-18-62
 Page 2 of 16
 Cancels page 2
 Dated 12-5-60

JOINT COMPOUNDS FORMULAS (Cont'd)

	Dallas J-1193	Hagersville J-1169B	Chamblee J-1062A
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	-	0.3	0.3
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyandiamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	as req'd	As Req.	As Req.
Sericite Mica - (Note 4)	15.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
#4 Peerless Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Sterox CD - (Note 8)	0.100	0.100	0.100
Tributylphosphate - (Note 8)	0.050	0.050	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	0.3	-	-
Mica T	Formula V	-	-

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex alginate.

Operating Division PRODUCT PROCEDURE Approved: <i>mgb</i>	PERF-A-TAPE JOINT COMPOUND J-1214D FORMULA GYPSUM	No. 61-2-22-3 Date 4-18-62 Page 1 of 1 Cancels Page 1 Dated 10-30-61
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Gypsum to manufacture and ship Perf-A-Tape Joint Compound J-1214D Formula. Specifications as follows:

MANUFACTURING MILL - Gypsum

PRODUCT - Perf-A-Tape Joint Compound

FORMULA - **J-1214D**

Casein, 100 mesh uncoiled	7.0%
Protatek A-155 Alginate	0.3
Ammonium Oxalate	1.2
Ammonium Pentaborate	1.2
Hydrated Lime	about 0.15 as req'd for normal pH
Dicyandiamide	1.0
Mica T	per Formula V
JM7RF1 Asbestos	(2:1 asbestos blend as req'd
PC7RF9	(8-9% in lab batches
Ser X	15.0
750 Marble	to make 100%
<u>Liquid Mix</u>	0.153
Sterox CD	0.1%
Tributylphosphate	0.05%
Neutralizer 5050	0.003%

RAW MATERIALS

Protatek A-155	
Mica T	Per Bulletin 6-143-2
750 Marble	Per Bulletin 6-24-9
Other raw materials as shown in Bulletin 61-2-22.	

FINISHED PRODUCT TESTS

Consistency: 64-67 cc for 400-425 Brabender at 77°F.

Application: Comparable to standard sample submitted by Research

Other Properties: Per Bulletin 61-2-22.

Packaging: Standard 25 lb. P-A-T Joint Compound bags except to change mixing directions to read 15 to 16 pts. of water. Also the letter "c" to follow the standard code marking on the bag to identify this formula.

Shipment: Chicago and Lakeland Sales Districts, the St. Louis District and as directed by Department 144.

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE	PERF-A-TAPE JOINT COMPOUND FORMULA J1239A	No. 61-2-22-E Date 5-14-62 Page 1 of 2
Approved: <i>gnJB</i>	DALLAS	Cancels Page 1 Dated 12-7-61

Dallas to manufacture Perf-A-Tape Joint Compound, Formula J1239A, for shipments to Kansas City (and Denver District on special order only) as directed by Merchandising. Specifications as follows:

FORMULA

Regular fine ground un-oiled Argentine casein	4.0%
Montreal Casein Co. RH_2 Casein	3.0
Protatek A 155 alginate	.3
Vancide 51 Z	.15
Dicyandiamide	1.0
Hydrated lime	As req'd - usually .1 to .2%
Ammonium Oxalate	1.2
Nicolet 7 T G25 Asbestos	As req'd for normal consistency (7 to 9% average)
Mica JC	per formula V
#750 Georgia Marble	40.0
Pure Cal #1	to make 100%
Liquid Mix (see Note 2)	.153

RAW MATERIALS

All are present joint cement grade materials with the addition of:

- Vancide 51 Z (R.T. Vanderbilt) per bulletin 6-100-1
- MCC- RH_2 casein - This is a fast dissolving, spray dried casein which should meet the following specifications as received at Dallas:

Moisture	-	6% maximum
- Screen Test	- / 30 mesh	None
	- / 40 mesh	1% maximum
	- / 60 mesh	10% maximum
	- -100 mesh	approximately 80%

NOTE 1: Store this RH_2 casein in the driest possible location. Check moisture on a sample of this casein used each shift, and report results to J. W. Gill - Dept. 151.

mgb

PERF-A-TAPE JOINT COMPOUNDS

No. 61-2-22
Date 10-23-62
Page 2 of 16
Cancels Page 2
Dated 4-18-62

JOINT COMPOUNDS FORMULAS (Cont'd)

	Dallas J-1193	Hagersville J-1169B	Chamblee J-1062A
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	-	0.3	-
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyandiamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	as req'd	As Req.	As Req.
Sericite Mica - (Note 4)	15.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
#4 Peerless Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Sterox CD - (Note 8)	0.100	0.100	0.100
Tributylphosphate - (Note 8)	0.050	0.050	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	0.3	-	0.3
Mica T	Formula V	-	-

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex alginate.

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE	PERF-A-TAPE COMPOUND FORMULA J-1267D	No. 61-2-224-A Date 2-12-63 Page 1 of 1 Cancels Dated NEW
Approved: <i>gm</i>	CHAMBLEE	

Chamblee to manufacture and ship Formula J-1267D Perf-A-Tape Compound to the Dixie Drywall Co., in Atlanta, Georgia, for field trials which are to be arranged for by Atlanta District, followed by H. A. Fowler (Dept. 159, Atlanta) and appropriate Chamblee personnel.

PERF-A-TAPE COMPOUND - FORMULA J-1267D For all 25# bags of Perf-A-Tape Compound and 18# bags Perf-A-Tape Joint System.

Casein 100 M, uncoiled	7.0
Sodium Pentachlorophenate	0.25
Ammonium Oxalate	1.25 - 1.4
Hydrated Lime to give normal pH & solution rate	.1 - .3 (.15 used in lab)
Dicyandiamide	0.5
Asbestos JM-7RF1	As required to give normal 6-7% consistency approx. range based on lab results.
DKW Mineralite	15.0
Mica JC	Formula V x 1.1
No. 750 Marble	To make up 100%
Neutralizer #5050 (1)	.003
KELSIZE LV Alginate	0.3
Sterox CD	.1%
Tributylphosphate (1)	.05

- (1) The liquid wetting agents - Sterox CD, Tributylphosphate and Neutralizer #5050 are to be mixed together in proper proportions and sprayed into the batch in the Broughton Mixer. In cold weather, the solution may be thinned with isopropyl alcohol if necessary to facilitate spraying.

COMPOUND TO BE COLORED MANILA COLOR SLIGHTLY DEEPER THAN PRESENT TOPPING COMPOUND.

Finished Product Tests

Consistency 68-72 cc normal 70 cc. for a Brabender reading of 665 $\pm$ 25 at 77°F. ("New" machine values.)

Other tests per Bulletin 61-2-22.

This bulletin expires 2-15-64.

Operating Division PRODUCT PROCEDURE	PERF-A-TAPE COMPOUND FORMULA J801V	No. 61-2-22-4 Date 3-11-63 Page 1 of 1
Approved: <i>mgb</i>	GYPSUM	Cancels Page 1 Dated 1-30-62

Gypsum to manufacture and ship Formula J801V Perf-A-Tape Compound to the Dixie Drywall Co., in Atlanta, Georgia.

PERF-A-TAPE COMPOUND - FORMULA J801V - For all 25# bags of Perf-A-Tape Compound and 18# bags Perf-A-Tape Joint System.

Casein 100 M, Uncoiled	7.0
Sodium Pentachlorophenate	0.25
Ammonium Oxalate	1.25 - 1.4
Hydrated Lime to give normal pH & solution rate	.15 - .3
Dicyandiamide	0.5
Asbestos JM-7RF1	As required to give normal consistency approx. range 7 - 10% based on lab results.
BI White #1 Grade	15.0
Ser-X	15.0
Mica JC (Stonelite)	Formula V x 1.1
Neutralizer #5050 (1)	To make up 100%
Ammonium Alginate (Marx or Collatex AS/KK)	.003
Sterox CD	.15
Tributylphosphate (1)	.05

(1) The liquid wetting agents - Sterox CD, Tributylphosphate and Neutralizer #5050 are to be mixed together in proper proportions and sprayed into the batch in the Broughton Mixer. In cold weather, the solution may be thinned with isopropyl alcohol if necessary to facilitate spraying.

COMPOUND TO BE COLORED MANILA COLOR SLIGHTLY DEEPER THAN PRESENT TOPPING COMPOUND.

Finished Product Tests

Consistency 68-72 cc normal 70 cc. for a Brabender reading of 500 $\pm$ 20 at 77°F.

Other tests as per Bulletin 61-2-22.

No. 51-2-22
 Date 3-11-63
 Page 2 of 16
 Cancels Page 2
 Dated 10-23-62

PERF-A-TAPE JOINT COMPOUNDS

am 8/3
 7/18

JOINT COMPOUNDS FORMULAS (Cont'd)

	<u>Dallas</u> <u>J-1193</u>	<u>Hagersville</u> <u>J-1169B</u>	<u>Chamblee</u> <u>J-10624</u>
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	-	0.3	-
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyandiamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	as req'd	As Req.	As Req.
Sericite Mica - (Note 4)	15.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
Peerless Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Sterox CD - (Note 8)	0.100	0.100	0.100
Tributylphosphate - (Note 8)	0.050	0.050	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate (Note 9)	0.3	-	0.3
Mica T	Formula V	-	-

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex Alginate.

OP010 0311

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE	PERF-A-TAPE JOINT COMPOUND FORMULA J1297B	No. 61-2-22-M
		Date 7-30-63
Approved: <i>MJB</i>	DALLAS	Page 1 of 2
		Cancels
		Dated NEW

Dallas to manufacture Perf-A-Tape Joint Compound, Formula J1297B, for shipments to Denver District as directed by Merchandising. Specifications as follows:

<u>FORMULA</u>	<u>J1297B</u>
Argentine (International) F.G. uncoiled casein	5.33%
Kelsize LV	.4
SG-62	.333
SOCCHI 7364	.08
Dicyandiamide	1.0
Zinc oxide (#42 green label)	.1
Ammonium oxalate	.6
Nicolet 7TG25 Asbestos	As req'd (4.0% in lab batch)
Carey 7RF9	3.33
Mica JC	Per formula V
*Special Coarse Pure Cal	To make 100%
Polyglycol F1200	.4
Neutralizer 5050	.001

*When special coarse Pure Cal is not available, use 40% FloFloat JF plus enough #1 Pure Cal to make 100%.

RAW MATERIALS

Per Bulletins 61-2-22 or 61-2-23 with addition of:

- 1) SOCCHI 7364 - A fungicide from Scientific Chemicals Inc., Chicago.
- 2) Special Coarse Pure Cal - To equal the April, 1963, sample of this new grind of Pure Cal.

PROCESSING

Mix and pulverize per Bulletin 61-2-22.

No. 61-2-22-M
Date 7-30-63
Page 2 of 2
Cancels
Dated NEW

PERF-A-TAPE JOINT COMPOUND
FORMULA J1297B

DALLAS

FINISHED PRODUCT SPECIFICATIONS

Color - Natural white.

Consistency - 68-72 cc (70cc normal) at 77°, 650 BB (VC-3 at 75 RPM).

Application - To match approved standard.

Bond - Not less than 5 in hot room or ordinary lab room test. Not
less than 2 at 90% RH (allow ample drying time at this condition).

Odor - Very mild - perfume plus ammonia.

pH - 8.0 to 8.4

Edge and check cracking (on bond test panel) - None.

Moisture - 1.0% maximum.

Lumps in dry powder - None.

Grit - application on SHEETROCK - None.

PACKING

In standard 25 lb. Perf-A-Tape compound bags.

IDENTIFICATION

Add the letter "G" after the regular code.

SHIPPING

Per instructions from Department #147-5.

This Bulletin expires 8-1-64.

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE	PERF-A-TAPE JOINT COMPOUND FORMULA J1297B	No. 61-2-22-M Date 9-26-63 Page 1 of 2
Approved: <i>gmg</i>	DALLAS	Cancels Page 1 Dated 7-30-63

Dallas to manufacture Perf-A-Tape Joint Compound, Formula J1297B, for shipments to Denver District as directed by Merchandising. Specifications as follows:

<u>FORMULA</u>	<u>J1297B</u>
Argentine (International) F.G. uncoiled casein	5.33%
Kelsize LV	.4
SG-62	.333
SOCCHI 7364	.08
Dicyandiamide	1.0
Zinc oxide (#42 green label)	.1
Ammonium oxalate	.6
Nicolet 7TG25 Asbestos	As req'd (4.0% in lab batch)
Carey 7RF9	3.33
Mica JC	Per formula V
Micro Fill #1	To make 100%
Polyglycol F1200	.4
Neutralizer 5050	.001

RAW MATERIALS

Per Bulletins 61-2-22 or 61-2-23 with addition of:

SOCCHI 7364 - A fungicide from Scientific Chemicals Inc., Chicago.
Microfill #1 per PMS 6-24-10.

PROCESSING

Mix and pulverize per Bulletin 61-2-22.

No. 61-2-22
Date 10-10-63
Page 2 of 16

PERF-A-TAPE JOINT COMPOUNDS

Carrels Page 2
Dated 3-11-63

mgB

JOINT COMPOUNDS FORMULAS (Cont'd)

	<u>Dallas</u> <u>J-1193</u>	<u>Hagersville</u> <u>J-1169B</u>	<u>Chamblee</u> <u>J-1062A</u>
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	-	0.3	-
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyandiamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	as req'd	As Req.	As Req.
Sericite Mica - (Note 4)	10.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
Peerless Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Sterox CD - (Note 8)	0.100	0.100	0.100
Tributylphosphate - (Note 8)	0.050	0.050	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate (Note 9)	0.3	-	0.3
Mica T	Formula V	-	-

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex Alginate.

OP010 0299

Operating Division PRODUCT PROCEDURE		PERF-A-TAPE JOINT COMPOUNDS		No. 61-2-22 Date 12-3-63 Page 1 of 16 Cancels Page 1 Dated 4-18-62	
Approved: <i>mgB</i>					

	Gypsum J815C	New Brighton J-1304C	South Gate J1066
Casein	3.5	3.5	7.0
Refined Soy Protein	4.0	4.0	-
Ammonium Oxalate	1.2	1.2	1.1
Sodium Pentachlorophenate	-	-	0.3
Ammonium Pentaborate	1.2	1.2	-
Ammonium Alginate - (Note 2)	0.3	0.3	0.3
Hydrated Lime	0-0.15	0-0.15	0.1-0.2
Dicyandiamide	0.5	0.5	1.0
Asbestos Floats - (Note 3)	As Req.	As Req.	As Req.
Sericite Mica - (Note 4)	15.0	15.0	15.0
Whiting - (Note 5)	15.0	-	-
Mica J.C. - (Note 6)	Formula V	Formula V	Formula V
Mica T - (Note 6)	-	-	-
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Sterox CD - (Note 8)	0.100	0.100	0.100
Tributylphosphate - (Note 8)	0.050	0.050	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003

No. 61-2-22-M.
Date 1-14-64
Page 2 of 2
Cancels
Dated 7-30-63

PERF-A-TAPE JOINT COMPOUND
FORMULA J1297B

DALLAS

2/1/63

FINISHED PRODUCT SPECIFICATIONS

Color - Natural white.

Consistency - 68-72 cc (70cc normal) at 77°, 650 BB (VC-3 at 75 RPM).

Application - To match approved standard.

Bond - Not less than 5 in hot room or ordinary lab room test. Not less than 2 at 90% RH (allow ample drying time at this condition).

Odor - Very mild - perfume plus ammonia.

pH - 8.0 to 8.4

Edge and check cracking (on bond test panel) - None.

Moisture - 1.0% maximum.

Lumps in dry powder - None.

Grit - application on SHEETROCK - None.

PACKING

In standard 25 lb. Perf-A-Tape compound bags.

IDENTIFICATION

Add the letter "G" after the regular code.

SHIPPING

Per instructions from Department #147-2.

This Bulletin expires 8-1-64.

Operating Division
PRODUCT PROCEDURE

PERF-A-TAPE COMPOUND
FORMULA J-1267D

No. 61-2-22-4
Date 4-22-64
Page 1 of 1
Cancels Page 1
Dated 3-17-64

Approved: 

CHAMBLEE

Chamblee to manufacture and ship Formula J-1267D Perf-A-Tape Compound to the Dixie Drywall Co., in Atlanta, Georgia.

PERF-A-TAPE COMPOUND - FORMULA J-1267D For all 25# bags of Perf-A-Tape Compound and 18# bags Perf-A-Tape Joint System.

Casein 100 M, uncoiled	7.0
Sodium Pentachlorophenate	0.25
Ammonium Oxalate	1.25 - 1.4
Hydrated Lime to give normal pH & solution rate	.1 - .3 (.15 used in lab)
Dicyandiamide	0.5
Asbestos JM-7RF1	As required to give normal consistency approx. range 6-7% based on lab results.
DKW Mineralite	15.0
Mica JC	Formula V x 1.1
No. 750 Marble	To make up 100%

KELSIZE LV Alginate	0.3
Polyglycol P1200 (1)	.150%
Neutralizer #5050 (1)	.003

(1) The liquid wetting agents - Polyglycol P1200 and Neutralizer #5050 are to be mixed together in proper proportions and sprayed into the batch in the Broughton Mixer. In cold weather, the solution may be thinned with isopropyl alcohol if necessary to facilitate spraying.

COMPOUND TO BE COLORED MANILA COLOR SLIGHTLY DEEPER THAN PRESENT TOPPING COMPOUND.

Finished Product Tests

Consistency 68-72 cc normal 70 cc for a Brabender reading of 665 $\pm$ 25 at 77°F. ("New" machine values.)

Other tests per Bulletin 61-2-22.

Operating Division	PERF-A-TAPE JOINT COMPOUND J-1214D FORMULA	No. 61-2-22-3
PRODUCT PROCEDURE		Date 4-22-64
Approved: <i>mgb</i>		Page 1 of 1
	GYPSUM	Cancels
		Dated 4-18-62

Gypsum to manufacture and ship Perf-A-Tape Joint Compound J-1214D Formula.
Specifications as follows:

MANUFACTURING MILL - Gypsum

PRODUCT - Perf-A-Tape Joint Compound

FORMULA -

J-1214D

Casein, 100 mesh uncoiled	7.0%
Protatek A-155 Alginate	0.3
Ammonium Oxalate	1.2
Ammonium Pentaborate	1.2
Hydrated Lime	about 0.15 as req'd for normal pH
Dicyandiamide	1.0
Mica T	per Formula V
JM7RF1 Asbestos	(2:1 asbestos blend as req'd
PC7RF9	(8-9% in lab batches
Ser X	15.0
750 Marble	to make 100%
<u>Liquid Mix</u>	0.153
Polyglycol P1200	0.150%
Neutralizer 5050	0.003%

RAW MATERIALS

Protatek A-155
Mica T Per Bulletin 6-143-2
750 Marble Per Bulletin 6-24-9
Other raw materials as shown in Bulletin 61-2-22.

FINISHED PRODUCT TESTS

Consistency: 64-67 cc for 400-425 Brabender at 77°F.
Application: Comparable to standard sample submitted by Research
Other Properties: Per Bulletin 61-2-22.
Packaging: Standard 25 lb. P-A-T Joint Compound bags except to change mixing directions to read 15 to 16 pts. of water. Also the letter "c" to follow the standard code marking on the bag to identify this formula.
Shipment: Chicago and Lakeland Sales Districts, the St. Louis District and as directed by Department 340-1.

Operating Division
PRODUCT PROCEDURE

PERF-A-TAPE JOINT COMPOUNDS

No. 61-2-22
Date 4-22-64
Page 1 of 16
Cancels Page 1
Dated 12-3-63

Approved: *9/1/63*

MANUFACTURING PLANTS

Chamblee, Dallas, Gypsum, Hagersville, New Brighton, South Gate

JOINT COMPOUND FORMULAS

	Gypsum J815C	New Brighton J-1304C	South Gate J1066
Casein	3.5	3.5	7.0
Refined Soy Protein	4.0	4.0	-
Ammonium Oxalate	1.2	1.2	1.1
Sodium Pentachlorophenate	-	-	0.3
Ammonium Pentaborate	1.2	1.2	-
Ammonium Alginate - (Note 2)	0.3	0.3	0.3
Hydrated Lime	0-0.15	0-0.15	0.1-0.2
Dicyandiamide	0.5	0.5	1.0
Asbestos Floats - (Note 3)	As Req.	As Req.	As Req.
Sericite Nica - (Note 4)	15.0	15.0	15.0
Whiting - (Note 5)	15.0	-	-
Mica J.C. - (Note 6)	Formula V	Formula V	-
Mica T - (Note 6)	-	-	Formula V
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Polyglycol PL200 (Note 8)	0.150	0.150	0.150
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003

No. 61-2-22
 Date 4-22-64
 Page 2 of 16
 Cancels Page 2
 Dated 10-10-63

PERF-A-TAPE JOINT COMPOUNDS

mgB

JOINT COMPOUNDS FORMULAS (Cont'd)

	<u>Dallas</u> <u>J-1193</u>	<u>Hagersville</u> <u>J-1169B</u>	<u>Chamblee</u> <u>J-1062A</u>
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	-	0.3	-
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyandiamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	as req'd	As Req.	As Req.
Sericite Mica - (Note 4)	10.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
Peerless Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Polyglycol P1200 (Note 8)	0.150	0.150	0.150
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate (Note 9)	0.3	-	0.3
Mica T	Formula V	-	-

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex Alginate.

SPECIAL BULLETIN

Operating Division	PERF-A-TAPE JOINT COMPOUND	No. 61-2-22-E
PRODUCT PROCEDURE	FORMULA J1239A	Date 6-19-64
Approved: <i>Lee</i>	DALLAS	Page 1 of 2
		Cancels
		Dated Reinstated

Dallas to manufacture Perf-A-Tape Joint Compound, Formula J1239A, (for use as a texturing material) for shipments to Kansas City and Denver District on special order only as directed by Merchandising. Specifications as follows:

FORMULA

Regular fine ground casein	7.0%
Sodium Alginate	0.25
Vancide 51 Z - See Note 1	.15
Dicyandiamide	1.0
Hydrated lime	As req'd - usually .1 to .2%
Ammonium Oxalate	1.2
Nicolet 7 T G25 Asbestos	As req'd for normal consistency (7 to 9% average)
Mica JC	per formula V
Flo Float JF	40.0
Microfil #1	to make 100%
Liquid Mix (see Note 2)	.153

RAW MATERIALS

All are present joint cement grade materials

NOTE 1: Dallas plant to use Advacide TJP (0.1%) when present inventory of Vancide 51-Z is exhausted. Dallas to advise Sales District of color change to be noted when this change is made.

Original date of issue 12-7-61.

No. 61-2-22-E

Date 6-19-64

Page 2 of 2

Cancels

Dated Reinstated

PERF-A-TAPE JOINT COMPOUND
FORMULA J1239A

DALLAS

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RAW MATERIALS (Cont'd)

NOTE 2: The liquid mix to be Polyglycol P1200 and Neutralizer 5050 in the ratio 50 to 1.

PROCESSING

Same as for present dry joint compounds.

COLOR

Natural light beige (after application and drying) while Vancide 51 Z is used; Natural gray white thereafter.

FINISHED PRODUCT TESTS

Consistency - 62 to 66 cc - Normal 63 cc - at 500 Brabender, 77°F.

pH - 8.4 to 8.7 at 77°F, 45 minutes after mixing.

Bond - 5 minimum (rel. hum. below 50% during drying and testing).

Application properties - per std. sample from Research. Other tests per Bulletin 61-2-22.

Tests at texturing consistency -

Consistency - 110 cc $\pm$ 5 cc for 90 BB with 5/16" flag paddle, 77°F,
75 RPM, 250 cmg torque head.

Mixing, brushing, stippling, dry hardness and rewet - to match approved standard.

CODING

Per 53-1-6 - use letter K in addition to date and batch numbers to indicate this compound.

PACKAGING

In standard 25 lb. PAT joint compound bags.

SHIPMENT

For Kansas City District and on orders for Denver District only when indicated on 379 as "K" Formula. Denver District bags are to be stencilled - "FOR TEXTURE ONLY".

This bulletin expires 6-15-65.

Operating Division PRODUCT PROCEDURE Approved: <i>JJ</i>	PERF-A-TAPE JOINT COMPOUND J-1214D FORMULA GYP SUM	No. 61-2-22-3 Date 7-10-64 Page 1 of 1 Cancels Page 1 Dated 4-22-64
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Gypsum to manufacture and ship Perf-A-Tape Joint Compound J-1214D Formula. Specifications as follows:

MANUFACTURING MILL - Gypsum

PRODUCT - Perf-A-Tape Joint Compound

FORMULA - J-1214D

Cassin, 100 mesh uncoiled	7.0%
Protatek A-155 Alginate	0.3
Ammonium Oxalate	1.2
Ammonium Pentaborate	1.2
Hydrated Lime	about 0.15 as req'd for normal pH
Dicyandiamide	1.0
Mica T	per Formula V
JM/RFL Asbestos	(2:1 asbestos blend as req'd
PC7RF9	(8-9% in lab batches
Ser X	15.0
750 Marble	to make 100%
<u>Liquid Mix</u>	0.153
Polyglycol F1200	0.150%
Neutralizer 5050	0.003%

RAW MATERIALS

Protatek A-155	
Mica T	Per Bulletin 6-143-2
750 Marble	Per Bulletin 6-24-9
Other raw materials as shown in Bulletin 61-2-22.	

FINISHED PRODUCT TESTS

Consistency: 64-67 cc for 400-425 Brabender at 77°F.

Application: Comparable to standard sample submitted by Research

Other Properties: Per Bulletin 61-2-22.

Packaging: Standard 25 lb. P-A-T Joint Compound bags except to change mixing directions to read 15 to 16 pts. of water. Also the letter "c" to follow the standard code marking on the bag to identify this formula.

Shipment: St. Louis District and as directed by Department 147-2.

Operating Division
PRODUCT PROCEDURE

PERF-A-TAPE JOINT COMPOUNDS

No. 61-2-22
Date 8-6-64
Page 1 of 17
Cancels Page 1
Dated 4-22-64

Approved: *JCF*

MANUFACTURING PLANTS

Chamblee, Dallas, Gypsum, Hagersville, New Brighton, South Gate

JOINT COMPOUND FORMULAS

	Gypsum J815C	New Brighton J-1304C	South Gate J1066
Casein	3.5	3.5	7.0
Refined Soy Protein	4.0	4.0	-
Ammonium Oxalate	1.2	1.2	1.1
Sodium Pentachlorophenate	-	-	0.3
Ammonium Pentaborate	1.2	1.2	-
Ammonium Alginate - (Note 2)	0.3	0.3	-
Hydrated Lime	0-0.15	0-0.15	0.1-0.2
Dicyandiamide	0.5	0.5	1.0
Asbestos Floats - (Note 3)	As Req.	As Req.	As Req.
Sericite Mica - (Note 4)	15.0	15.0	15.0
Whiting - (Note 5)	15.0	-	-
Mica J.C. - (Note 6)	Formula V	Formula V	-
Mica T - (Note 6)	-	-	Formula V
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Polyglydol P1200 (Note 8)	0.150	0.150	0.150
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	-	-	0.3

Operating Division PRODUCT PROCEDURE		PERF-A-TAPE JOINT COMPOUNDS		No. 61-2-22 Date 8-6-64 Page 1 of 16 Cancels Page 1 Dated 4-22-64	
Approved: <i>JJ</i>					

	Gypsum J815C	New Brighton J-1304C	South Gate J1066
Casein	3.5	3.5	7.0
Refined Soy Protein	4.0	4.0	-
Ammonium Oxalate	1.2	1.2	1.1
Sodium Pentachlorophenate	-	-	0.3
Ammonium Pentaborate	1.2	1.2	-
Ammonium Alginate - (Note 2)	0.3	0.3	-
Hydrated Lime	0-0.15	0-0.15	0.1-0.2
Dicyandiamide	0.5	0.5	1.0
Asbestos Floats - (Note 3)	As Req.	As Req.	As Req.
Sericite Mica - (Note 4)	15.0	15.0	15.0
Whiting - (Note 5)	15.0	-	-
Mica J.C. - (Note 6)	Formula V	Formula V	Formula V
Mica T - (Note 6)	-	-	To Make 100%
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	0.150
Polyglycol F1200 (Note 8)	0.150	0.150	0.150
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	-	-	0.3

No. 01-2-22
 Date 8-6-64
 Page 2 of 16
 Cancels Page 2
 Dated 4-22-64

PERF-A-TAPE JOINT COMPOUNDS

JZ

JOINT COMPOUNDS FORMULAS (Cont'd)

	<u>Dallas</u> <u>J-1193</u>	<u>Hagersville</u> <u>J-1169B</u>	<u>Chamblee</u> <u>J-1062A</u>
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	-	0.3	-
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyandiamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	as req'd	As Req.	As Req.
Sericite Mica - (Note 4)	10.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
74 Peerless Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Polyglycol P1200 (Note 8)	0.150	0.150	0.150
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	0.3	-	0.3
Mica T	Formula V	-	-

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex Alginate.

OP010 0283

SPECIAL BULLETIN

Operating Division Approved:	Perf-A-Tape Joint Compound	No. 61-2-22- Date 12/ /64 Page 1 of 1 Cancels New Dated
Chasblee to manufacture J-1062A embedding compound substituting high viscosity PRO-COTE U soy protein for the regularly used viscosity grade. The plant to be authorized to use same workload of the high viscosity PRO-COTE U. MANUFACTURING PLANT: Chasblee FINISHED PRODUCT SPECIFICATIONS: Per bulletin 61-2-22 FORMULA: Casein, FG uncoiled 5.0% PRO-COTE U 2.5% Other ingredients per bulletin 61-2-22 All other specifications per bulletin 61-2-22 This bulletin to expire (6 mos. from date of issue)		

REQUEST FOR NEW OR REVISION OF OPERATING BULLETIN

GENERAL DISTRIBUTION

170-4 (3 COPIES)

DATE 12-28-64

PLANT DISTRIBUTION-ONLY

SEND ORIGINAL & 3 COPIES TO
THE PRODUCTION MANAGER

BULLETIN 61-2-22-
(temporary)

SUBJECT: Perf-A-Tape Joint Compound

PLANTS CONCERNED: Chamblee

DETAILS AND OBJECT OF PROPOSED PRACTICE: (INDICATE WHAT IS WANTED, LIST MAJOR CHANGES, EXPLAIN WHY CHANGE IS WANTED).

Chamblee to be authorized to manufacture J-1063 embedding compound substituting high viscosity Pro-Cote U soy protein for the regularly used viscosity grade.

The plant to be authorized to use one carload of the high viscosity Pro-Cote U.

A formula adjustment is necessary to permit the use of this soy protein.

The new soy bean crop is yielding this type of protein from the vendor's processing and the plant must use it, at least temporarily, or halt production. The Company needs to gain production experience using this protein in case its new properties are of long-term duration and the would affect Key Brighton and Qypex also. The temporary formula involves no cost penalty.

EFFECT ON QUALITY: The adjusted formula performed essentially the same as the regular formula in laboratory comparison tests.

BOOKINGS: (EXPLAIN EFFECT ON FACTORS BELOW IF APPLICABLE TO PROPOSAL)

MILL COST (CURRENT)	<u>33.90/M</u>	(EXPECTED)	<u>35.03/M</u>
SELLING PRICE (CURRENT)	<u>1.14 66/M</u>	(EXPECTED)	<u>1.14 66/M</u>
SALES VOLUME	<u>6,548 M</u>	Per Annual	
EQUIPMENT CHANGES AND CAPACITIES	<u>NONE</u>		
RAW MATERIALS, CONTAINERS, LABELS OR TAPES MADE OBSOLETE	<u>NONE</u>		
FINISHED PRODUCTS OBSOLETE BY THIS PROPOSAL OR REQUIRING SPECIAL DISPOSITION ACTION	<u>NONE</u>		

SOURCE OF INFORMATION		
PERSON	DEPT.	DATE
PERM	151	12-29-64
PERM	147-2	1-1-65
PERM	147-2	1-1-65
PERM	151	12-29-64
PERM	151	12-29-64
PERM	151	12-29-64

INSTRUCTIONS:

All information requested is required to obtain approval. Mark "not applicable" where required. INCOMPLETE REQUESTS WILL BE RETURNED.

Use back of this sheet or additional sheets if necessary. Attach laboratory test reports, field trip reports, and copies of pertinent correspondence.

See Bulletin p-1 & p-2 for additional instructions. Plants to supplement request with marked-up copies (photo copy will do) of bulletin showing proposed revision.

*PLANTS WILL USE UP PRESENT STOCKS OF CONTAINERS, LABELS AND TAPES UNLESS REVISED BULLETIN INDICATES OTHERWISE.

DO NOT FILL OUT THIS SECTION - PERSONS TO APPROVE WILL BE LISTED BY DEPT. 170-K.

PLEASE SIGN BULLETIN HERE

DEPT.	NAME	INITIALS	DATE SIGNED

HAVE THE CORRESPONDING CHANGES IN OTHER COMPANY BULLETINS AND MANUALS BEEN REQUESTED?

N/A

REQUEST PREPARED BY - P. B. FLETCHER

FOR DEPARTMENT 151

No. 61-2-22
Date 12-28-64
Page 2 of 16

PERF-A-TAPE JOINT COMPOUNDS

Cancels Page 2
Dated 8-6-64

JP

JOINT COMPOUNDS FORMULAS (Cont'd)

	<u>Dallas</u> <u>J-1193</u>	<u>Hagersville</u> <u>J-1169B</u>	<u>Chamblee</u> <u>J-1062A</u>
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	-	0.3	-
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyandiamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	as req'd	As Req.	As Req.
Sericite Mica - (Note 4)	10.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
#4 Peerless Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Polyglycol Pl200 (Note 8)	0.150	0.150	0.100
Tributyl Phosphate (Note 8)	-	-	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	0.3	-	0.3
Mica T	Formula V	-	-

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex Alginate.

DP010 0275

REQUEST FOR NEW OR REVISION OF OPERATING BULLETIN

MAIL TO (Original & 2 Copies):

PROD.MGR. - (WHEN FROM PLANTS)

170-K (WHEN FROM OTHERS)

BULLETIN NO. 61-222-3

DATE 1-19-65

COMMODITY CODE _____

SUBJECT: **Perf-A-Tape Joint Compound**

PLANTS CONCERNED: **Gypsum**

DETAILS AND OBJECT OF PROPOSED PRACTICE:

(INDICATE WHAT IS WANTED, LIST MAJOR CHANGES, EXPLAIN WHY CHANGE IS WANTED AND EFFECT ON QUALITY.)

On orders for joint compound from the Lakeland District described as "Pigmented Code 53", the plant is to ship formula J-1214-D with yellow pigment added so that the joint compound matches the color of pigmented topping compound. It is necessary to delete Ser-X and replace it with 750 Marble to obtain the required color match in this formula.

Plant will be changed to 35 per M lbs. based on estimated value of 100 M lbs. The unit cost will be \$ 35.

BOOKENDS: (EXPLAIN EFFECT ON FACTORS BELOW IF APPLICABLE TO PROPOSAL)

PLANT COST (CURRENT) \$16.40 per M lbs. (EXPECTED) \$16.05 per M lbs.

SELLING PRICE (CURRENT) N.A. (EXPECTED) _____

SALES VOLUME 100 M lbs. per year

EQUIPMENT CHANGES AND CAPACITIES _____

RAW MATERIALS, CONTAINERS, LABELS OR TAPES MADE OBSOLETE _____

FINISHED PRODUCTS MADE OBSOLETE OR REQUIRING SPECIAL DISPOSITION ACTION _____

SOURCE OF INFORMATION

PERSON	DEPT.	DATE
HRB	171-P	1-19-65

DOLLAR VALUE

DOLLAR VALUE

DOLLAR VALUE

INSTRUCTIONS: ----- INCOMPLETE REQUESTS WILL BE RETURNED

All information requested is required to obtain approval. Mark "Not Applicable" where required. Use back of this sheet or additional sheets if necessary. Attach laboratory test reports, field trip reports, and copies of pertinent correspondence. Supplement request with marked-up copies (photo copy will do) of bulletin showing proposed revision. See Bulletin 1-1 for additional instructions.

PLANTS WILL USE UP PRESENT STOCKS OF CONTAINERS, LABELS AND TAPES UNLESS REVISED BULLETIN INDICATES OTHERWISE.

DO NOT FILL OUT THIS SECTION - PERSONS TO APPROVE WILL BE LISTED BY DEPT. 170-K

PLEASE SIGN BULLETIN HERE

DEPT.	NAME	INITIALS	DATE SIGNED

HAVE THE CORRESPONDING CHANGES IN OTHER COMPANY BULLETINS AND MANUALS BEEN REQUESTED?

REQUEST PREPARED BY H. R. Bleuler

FOR DEPARTMENT 171-P

MS:

1-27-65

NP007 1303

Also cancels Bulletin 61-2-22-R dated 9-30-64.

Operating Division	PERF-A-TAPE JOINT COMPOUND J-1214D FORMULA	No. 61-2-22-3 Date 2-19-65 Page 1 of 1
PRODUCT PROCEDURE		
Approved: <i>JG</i>	GYPSUM	Cancels Page 1 Dated 7-10-64

Gypsum to manufacture and ship Perf-A-Tape Joint Compound J-1214D Formula.
Specifications as follows:

MANUFACTURING MILL - Gypsum

PRODUCT - Perf-A-Tape Joint Compound

FORMULAS

(1) J-1214D (unpigmented)

Casein, 100 mesh uncoiled	7.0%
Protatek A-155 Alginate	0.3
Ammonium Oxalate	1.2
Ammonium Pentaborate	1.2
Hydrated Lime	about 0.15 as req'd for normal pH
Dicyandiamide	1.0
Mica T	per Formula V
JM7RF1 Asbestos	(2:1 asbestos blend as req'd (8-9% in lab batches
PC7RF9	15.0
Ser X	to make 100%
750 Marble	
<u>Liquid Mix</u>	0.153
Polyglycol F1200	0.150%
Neutralizer 5050	0.003%

(2) J-1214D (pigmented)

Formula same as above in (1) ~~except~~ contains no Ser X and is pigmented with Ferrite Yellow to match the Topping Compound formula shipped to the account involved.

RAW MATERIALS

Protatek A-155
Mica T Per Bulletin 6-143-2
750 Marble Per Bulletin 6-24-9
Other raw materials as shown in Bulletin 61-2-22.

FINISHED PRODUCT TESTS

Consistency: 64-67 cc for 400-425 Brabender at 77°F.
Application: Comparable to standard sample submitted by Research
Other Properties: Per Bulletin 61-2-22.
Packaging: Standard 25 lb. P-A-T Joint Compound bags except to change mixing directions to read 15 to 16 pts. of water. Also the letter "c" to follow the standard code marking on the bag to identify this formula.

Shipment:

Unpigmented - St. Louis District and as directed by Dept. 147-2.
Pigmented - On orders designated "Pigmented Code 53" from Lakeland Dist.

No. 61-2-22

Date 5-28-65

Page 2 of 17

Cancels Page 2

Dated 12-28-64

PERF-A-TAPE JOINT COMPOUNDS

JG

JOINT COMPOUNDS FORMULAS (Cont'd)

	<u>Dallas</u> <u>J-1193</u>	<u>Hagersville</u> <u>J-1169B</u>	<u>Chamblee</u> <u>J-1062A</u>
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	-	0.3	0.3
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyandiamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	as req'd	As Req.	As Req.
Sericite Mica - (Note 4)	10.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
Peerless Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Polyglycol P1200 (Note 8)	0.150	0.150	0.100
Tributyl Phosphate (Note 8)	-	-	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	0.3	-	-
Mica T	Formula V	-	-

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex Alginate.

OP010 0254

Cancels Temporary Bulletin 61-2-22-E dated 6-19-64.

Operating Division PRODUCT PROCEDURE	PERF-A-TAPE JOINT COMPOUND FORMULA J1239A	No. 61-2-22-8 Date 6-14-65 Page 1 of 2
Approved: <i>JJ</i>	DALLAS	Cancels Dated NEW

DESCRIPTION

A Perf-A-Tape Joint Compound, Formula J1239A, (for use as a texturing material) for shipments to Kansas City and Denver District on special order only as directed by Merchandising. Specifications as follows:

PRODUCT LINE

Color - Natural gray white

FINISHED PRODUCT SPECIFICATIONS

Consistency - 62 to 66 cc - Normal 63 cc - at 500 Brabender, 77°F.

pH - 8.4 to 8.7 at 77°F, 45 minutes after mixing.

Bond - 5 min. (rel. hum. below 50% during drying and testing).

Application properties - per std. sample from Research. Other tests per Bulletin 61-2-22.

Tests at texturing consistency:

Consistency - 110 cc $\pm$ 5 cc for 90 EB with 5/16" flag paddle, 77°F,
75 RPM, 250 cmg. torque head.

Mixing, brushing, stippling, dry hardness and rewet - to match approved standard.

FORMULA

Regular fine ground casein	7.0%
Sodium Alginate	0.25
Advacide TJP	.15
Dicyandiamide	1.0
Hydrated lime	As req'd - usually .1 to .2%
Ammonium Oxalate	1.2
Nicolet 7 T G25 Asbestos	As req'd for normal consistency (7 to 9% average)
Mica JC	per formula V
Flo Float JF	40.0
Microfil #1	to make 100%
Liquid Mix:	.153
Polyglycol P1200 - 0.150%	
Neutralizer 5050 - 0.003%	

No. 61-2-22-8	PERF-A-TAPE JOINT COMPOUND FORMULA J1239A DALLAS	<i>22</i>
Date 6-14-65		
Page 2 of 2		
Cancels		
Dated NEW		

RAW MATERIALS

All are present joint compound grade materials.

MANUFACTURING PROCEDURE

Same as for present dry joint compounds.

CODING

Per 53-1-6 - use letter K in addition to date and batch numbers to indicate this compound.

PACKAGING

In standard 25 lb. and 32 lb. PAT joint compound bags.

SHIPMENT

For Kansas City District and on orders for Denver District only when indicated on 379 as "K" Formula. Denver District bags are to be stencilled - "FOR TEXTURE ONLY".

Operating Division
PRODUCT PROCEDURE

Approved: *J.B.*

CONFIDENTIAL
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PERF-A-TAPE JOINT COMPOUNDS

No. 61-2-22
Date 5-19-66
Page 5

Cancels Page 5
Dated 12-3-63

JOINT COMPOUND FORMULAS

	Gypsum J615C	New Brighton J-1304C	South Gate J1066
Casolin	3.5	3.5	7.0
Refined Soy Protein	4.0	4.0	-
Ammonium Chloride	1.2	1.2	1.1
Sodium P-tachlorophenate	-	-	0.3
Ammonium Pentaborate	1.2	1.2	-
Ammonium Magnate - (Note 2)	0.3	0.3	0.3
Hydroxyethyl Lime	0-0.15	0-0.15	0.1-0.2
Dicyclopentadiene	0.5	0.5	1.0
Activated Bleach - (Note 3)	As Req.	As Req.	As Req.
Sand for Bleach - (Note 4)	15.0	15.0	15.0
Water - (Note 5)	15.0	-	-
High P. G. - (Note 6)	Formula V	Formula V	Formula V
High P. G. - (Note 6)	-	-	-
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Polymerized Filler - (Note 8)	0.150	0.150	0.150
Neoprene Filler #5050 - (Note 8)	0.003	0.003	0.003

No. 61-2-22

Date 5-19-66

Page 6

Cancels Page 6

Dated 4-20-65

CONFIDENTIAL
DO NOT REPRODUCE OR COPY

PERR-A-TAPE JOINT COMPOUNDS

23

JOINT COMPOUND FORMULAS (Cont'd)

	Dallas J-1193	Montreal Hagersville J-1169B	Chamblee J-1062A
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate (Note 2A)	-	0.3	0.3
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyanamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	as req'd	As Req.	As Req.
Sericite Mica - (Note 4)	10.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
Excello Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Polyglycol P1200 (Note 8)	0.150	0.150	0.100
Tributyl Phosphate (Note 8)	-	-	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	0.3	-	-
Mica T	Formula V	-	-

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perr-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex Alginate. South Gate may use either Marex Ammonium Alginate or substitute 1/2 Sodium Alginate in J1066 Compound.

Note 2A Hagersville to substitute "Protamon S-120" alginate in place of Marex alginate.

OP010 0237

SPECIAL BULLETIN

Operating Division
PRODUCT PROCEDURE**CONFIDENTIAL**DO NOT REPRODUCE OR COPY
PERF-A-TAPE ~~FORM~~ PURPOSE COMPOUND

No. 61-2-26-YY

Date 10-14-66

Page 3

Approved: *JS*

(AP 160B)

Cancels

Dated

NEW

FORMULA

Fine ground, uncoated casein	5.0%
Marex alginate	.3
Tylose UM 4000P	.3
Ammonium pentaborate	1.2
Dicyandiamide	.8
Tetra sodium pyrophosphate	.2
Zinc oxide	.2
-200 mesh Bentonite	1.5
Mica 20 P-80-F	1.2 x formula V
JM 7RF1 Asbestos	As required for normal consistency (3.0% in lab batches)
PC 7RF9 Asbestos	3.0
Alba Car 45-3 or Marble White 325	To make 100%
CALCIUM CARBONATE	

RAW MATERIALS

~~All are present paint plant raw materials with the addition of:~~
~~-200 mesh Bentonite from National Lead Co.~~

MANUFACTURING PROCEDURE

Mix and micropulverize per Bulletin 61-2-22.

F.G. CASEIN	PER P.M.S.	6-26-4
MAREX ALGINATE		6-8-1
TYLOSE METHYLCCELLULOSE		6-25-5
AMMONIUM PENTABORATE		6-74-2
DICYANDIAMIDE		6-44-1
TETRA SODIUM PYROPHOSPHATE		6-177-Ed
ZINC OXIDE		6-94-93
BENTONITE		NATIONAL LEAD Co
MICA		6-143-1 8-61-1
ASBESTOS, 7RF-1 + 7RF-9		6-14-5
CARBONATE FILLER		6-24-1

7P009 0413

Cancel Special Bulletin 61-2-26-74, pages 1-3, dated 10-14-66
Originally Issued 10-5-64 SPECIAL BULLETIN 61-2-26-7

Operating Division PRODUCT PROCEDURE	PERF-A-TAPE ^{ALL} DUAL PURPOSE COMPOUND (AP 160B)	No. 61-2-26-74 Date 10-14-66 Page 1 Cancels Page 1 Dated 11-18-64 NFW
Approved: <i>JG</i>	SOUTH GATE	

~~This Bulletin expires 1-1-67~~

DESCRIPTION

A dry powdered joint compound to be used for both taping and South Gate to manufacture AP 160B Dual Purpose Joint Compound finishing of drywall joint.

MANUFACTURING PLANT

South Gate

IDENTIFICATION AND PACKAGING

~~25 lb. Bag per Bulletin 7-16-72-3~~

Package in 25 lb. bag per Bulletin 7-14-13-3

SHIPMENT

As directed by Western Region Marketing Services

01009 041214

61-2520-7
No. ~~61-2520-7~~
Date ~~10-14-66~~
Page 2
Cancels ~~Page 2~~
Dated ~~4-16-65~~ NEW

PERF-A-TAPE ^{ALL} ~~SEAL~~ PURPOSE COMPOUND
(AP 160B)
~~SOUTH GATE~~

FINISHED PRODUCT SPECIFICATIONS

- A. Color - Natural White
- B. Mixing - To match initial approved batch
- C. Consistency - 70 to 73cc - for 550 HB viscosity at 77°F 1 hour after mixing.
- D. pH - 7.5 to 8.0
- E. Application - To match initial approved batch
- F. Bond - 5 minimum at relative humidities below 50% with normal bonding Perf-A-Tape.
- G. Drying Shrinkage - Below 28% on 550HB viscosity mix.
- H. Edge and Check Cracking - None on bond test panels.

- 0 -

Operating Division	PERF-A-TAPE JOINT COMPOUND - ALL PURPOSE	No. 61-2-26-6
PRODUCT PROCEDURE		Date 5-18-67
Approved: <i>JG</i>	GYPSUM	Page 1
		Cancels Page 1
		Dated 2-17-65

C Gypsum to manufacture AP-52 All Purpose Compound, for shipment to the
C St. Louis District only (District to identify orders "Perf-A-Tape Joint
C Compound - All Purpose - #6") or other shipments as directed by Dept. 147-2.
Specifications as follows:

FINISHED PRODUCT SPECIFICATIONS

Consistency - Range 62-66cc, Normal 64cc to give a 420BB at 77°F.

pH - 8.2 to 8.5

Color - To match Sheetrock manila paper.

Tests per Bulletin 61-2-22.

FORMULA

AP-52

Casein	5.5
Ammonium Alginate*	0.7
Ammonium Oxalate	1.8
Hydrated Lime	as req'd for pH (Approx. 0.1)
Ammonium Pentaborate	1.2
Disyandiamide	0.8
JM 7RF-1 Asbestos	1/2 of amount req'd (3.5%)
PC 7RF-9 Asbestos	1/2 of amount req'd (3.5%)
	Lab. batch
Mica J.C.	0.7 Formula V
Ser-X	15.0
No. 750 Marble	To make 100%
Liquid Mix	0.153
Polyglycol P1200	0.150
Neutralizer 5050	0.003
Ferrite Yellow	0.15

RAW MATERIALS

* Ammonium Alginate - Protatek A-155 from Croda, Inc.

Asbestos Usage - Normal range should be 6.5 to 8.5%. If asbestos use consistently drops below 6.5% or is over 8.5%, send samples of the asbestos and compound to Research.

No. 750 Marble - Per Bulletin 6-24-9

Other Raw Material per Bulletin 61-2-23.

Processing - Per Bulletin 61-2-22.

C	No. 61-2-26-6	PERF-A-TAPE JOINT COMPOUND - ALL PURPOSE	
	Date 5-18-67		
	Page 2		
	Cancel Page 2	GYPSUM	
	Dated 2-17-65		

PACKAGING

C
D

Per Bulletin 7-16-11-3.

Add an M as a suffix to the regular code to identify this formulation.

7P009 0399

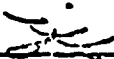
M-5791 (Back)

D Indicates Deletion C Indicates Change

SPECIAL BULLETIN

Operating Division

PRODUCT PROCEDURE

Approved: **CONFIDENTIAL****DO NOT REPRODUCE OR COPY**

PERF-A-TAPE JOINT COMPOUND

DUAL PURPOSE - (AP-4)

No. 61-2-26-1-2

Date 3-4-68

Page 2

Cancels

Dated NEW

FORMULAAP-4

F. G. Casein	3.0%
Soy Protein	3.0
Amm. Oxalate	1.0
Amm. Pentaborate	1.2
Amm. Alginate	0.7
Hyd. Lime	About 0.15
Dicyandiamide	1.0
JM7RFO2 Asbestos	About 5.0
Mica JC	0.6 Formula V
M-4 Talc	15.0
FF Limestone	-15.0
A-Dolomite	To Make 100%
Ferrite Yellow	0.15
Liquid Mix	0.153

RAW MATERIALS

Per Bulletin 61-2-22 except refined soy protein per PMS 6-123-1.

MANUFACTURING PROCEDURE

Per Bulletin 61-2-22.

End

0P009 0236

SPECIAL BULLETIN

Operating Division

PRODUCT PROCEDURE

Approved: *[Signature]***CONFIDENTIAL****DO NOT REPRODUCE OR COPY**PERF-A-TAPE JOINT COMPOUND
(J-1169B)

No. 61-2-22-FF

Date 3-4-68

Page 2

Cancels NEW

Dated

FORMULAJ-1169B

F. G. Casein	3.5%
Soy Protein	4.0
Amm. Oxalate	1.2
Amm. Pentaborate	1.2
Hyd. Lime	About 0.15
Dicyandiamide	1.0
JMTRFO2	About 5.0
Mica JC	0.8 Formula V
Talc M-4	15.0
FF Limestone	To Make 100%
Ammonium Alginate	0.3
Liquid Mix	0.153

RAW MATERIALS

Per Bulletin 61-2-22 except refined soy protein per FMS 6-123-1.

MANUFACTURING PROCEDURE

Per Bulletin 61-2-22.

End

SPECIAL BULLETIN

Operating Division	CONFIDENTIAL DO NOT REPRODUCE OR COPY PERP-A-TAPE JOINT COMPOUND ALL PURPOSE (AP-343)	No. 61-2-23-4-A
PRODUCT PROCEDURE		Date 4-30-68
Approved: <i>[Signature]</i>		Page 2
		Cancels <i>[Initials]</i> Dated

<u>FORMULA</u>	<u>AP-343</u>
Casein FG	4.5%
*Natrosol SG-61 or SG-67	0.8
Zinc Oxide	0.1
Ammonium Oxalate	1.0
Ammonium Pentaborate	1.2
Dicyandiamide	0.3
Hydrated Lime	About 0.15 (As Req'd)
P-85 Mica	Formula V
TRF02 Asbestos	• About 4.0 (As Req'd)
TSPP	0.1
#9NCS	To Make 100%

RAW MATERIALS

Per Bulletin 61-2-23-6, except -

*Natrosol - SG-61 (Oct. 1 to April 30)
 SG-67 (May 1 to Sept. 30)

MANUFACTURING PROCEDURE

Per Bulletin 61-2-23.

End

JP009 0351

Originally issued 4-30-68

SPECIAL BULLETIN

Operating Division

PRODUCT PROCEDURE

Approved: *[Signature]*

PERF-A-TAPE JOINT COMPOUND

ALL PURPOSE (AP-343)

No. 61-2-26-4-A

Date 12-9-68

Page 1

Cancels Page 1

Dated 4-30-68

This Bulletin expires 5-1-69.

DESCRIPTION

A joint compound designed for both embedding the tape and finishing joints in drywall construction.

MANUFACTURING PLANT

Gypsum

PRODUCT LINE

Joint Compound

IDENTIFICATION AND PACKAGING

C Pack in regular 25 lb. P-A-T Joint Compound (All) Purpose bags. Normal coding procedure.

SHIPPING

Detroit District only, unless approved by Department #971-E.

FINISHED PRODUCT SPECIFICATIONS

C Consistency - 64-65 cc (64cc normal) per 100 gms
C Viscosity - 430-630 BB units with pin paddle at 77°F
after 30 minutes soak and remix
pH - 8.1 to 8.5 (8.3 normal)
C Color - Pigmented unless ordered white.

- 0 -

SPECIAL BULLETIN

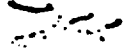
Operating Division	CONFIDENTIAL DO NOT REPRODUCE OR COPY PERM-A-TAPE JOINT COMPOUND ALL PURPOSE (AP-343)	No. 61-2-26-4-A
PRODUCT PROCEDURE		Date 12-9-68
Approved: <i>[Signature]</i>		Page 2
		Cancels Page 2 Dated 4-30-68

<u>FORMULA</u>	<u>AP-343</u>
Casein FG	4.5%
C Natrosol SG-68 (250 KXR)	0.8
Zinc Oxide	0.1
Ammonium Oxalate	1.0
Ammonium Pentaborate	1.2
Dicyandiamide	0.3
Hydrated Lime	About 0.15 (As Req'd)
P-85 Mica	Formula V
TRFO2 Asbestos	About 4.0 (As Req'd)
TSPP	0.1
#9NCS	To Make 100%

<u>RAW MATERIALS</u>
C Per Bulletin 61-2-23-6
D
D

<u>MANUFACTURING PROCEDURE</u>
Per Bulletin 61-2-23.

End

Operating Division PRODUCT PROCEDURE	P. A. T. JOINT COMPOUND FORMULA J1297B DALLAS	No. 61-2-22-7 Date 2-12-69 Page 1
Approved: 		Cancels Page 1 Dated 10-5-64

DESCRIPTION

Plant to manufacture PERP-A-TAPE Joint Compound, Formula J1297B for shipments to Denver District as directed by Merchandising.

PLANT

Dallas

PACKING

In standard 25 lb. or 32 lb. PERP-A-TAPE compound bags.

IDENTIFICATION

Add the letter "G" after the regular code.

SHIPPING

Per instructions from Department #147-2.

DP007 1335

Operating Division
PRODUCT PROCEDURE

CONFIDENTIAL

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P. A. T. JOINT COMPOUND FORMULA J1297B

No. 61-2-22-7
Date 2-12-69
Page 3

Approved: *[Signature]*

DALLAS

Cancelled
Dated NEW

FORMULA

J1297B

Argentine F. G. uncoiled casein	5.33%
Kelsize LV	.4
SG-62	.333
Advacide TJP	.1
Dicyandiamide	1.0
Zinc oxide (#42 green label)	.1
Ammonium oxalate	.6
Nicolet 7TG25 Asbestos	As req'd (4.0% in lab batch)
Carey 7RF9	3.33
Mica JC	Per formula V
Micro Fill #1	to make 100%
Polyglycol F1200	.4
Neutralizer 5050	.001

RAW MATERIALS

Per Bulletin 61-2-22 or 61-2-23 with addition of:

Advacide TJP Per Bulletin 6-100-12.

Microfill #1 Per Bulletin 6-24-10.

MANUFACTURING PROCEDURE

Mix and pulverize per Bulletin 61-2-22.

End

NP007 1336

Originally issued 4-30-68

SPECIAL BULLETIN

1st Extension

Operating Division

PERF-A-TAPE JOINT COMPOUND

No. 61-2-26--A

PRODUCT PROCEDURE

Date 5-2-69

Approved: *[Signature]*

ALL PURPOSE (AP-343)

Page 1

Cancels Page 1

Dated 12-9-68

C This Bulletin expires 11-1-69DESCRIPTION

A joint compound designed for both embedding the tape and finishing joints in drywall construction.

MANUFACTURING PLANT

Gypsum

PRODUCT LINE

Joint Compound

IDENTIFICATION AND PACKAGING

Pack in regular 25 lb. P-A-T Joint Compound All Purpose bags. Normal coding procedure.

SHIPPING

Detroit District only, unless approved by Department #971-E.

FINISHED PRODUCT SPECIFICATIONS

Consistency - 68-72 cc(70cc normal) per 100 gms
Viscosity - 430-630 BB units with pin paddle at 77°F
after 30 minutes soak and remix
pH - 8.1 to 8.5 (8.3 normal)
Color - Pigmented unless ordered white.

- 0 -

EXPIRED 11-1-69

JP009 0346

SPECIAL BULLETIN

Operating Division

CONFIDENTIAL

No. 61-2-26--A

PRODUCT PROCEDURE

DO NOT REPRODUCE OR COPY

Date 5-2-69

Page 2

Approved: *ijh*

PERF-A-TAPE JOINT COMPOUND

Cancels Page 2

ALL PURPOSE (AP-343)

Dated 12-9-68

FORMULAAP-343

C Casein FG	4.5%
C Natrosol SG-61	0.8
Zinc Oxide	0.1
Ammonium Oxalate	1.0
Ammonium Pentaborate	1.2
Dicyandiamide	0.3
Hydrated Lime	About 0.15 (As Req'd)
P-85 Mica	Formula V
TRFO2 Asbestos	About 4.0 (As Req'd)
TSPP	0.1
#9NCS	To Make 100%

RAW MATERIALS

Per Bulletin 61-2-23-6

MANUFACTURING PROCEDURE

Per Bulletin 61-2-23.

End

SPECIAL BULLETIN

Operating Division	PERF-A-TAPE JOINT COMPOUND SOUTH GATE	No.	61-2-22-MM
PRODUCT PROCEDURE		Date	7-21-69
Approved: <i>[Signature]</i>		Page	1
		Cancels Dated	NEW

This bulletin expires 7-1-70.

South Gate plant to manufacture and ship, for field trials and shipments as directed by P. B. Thompson -- LA#961, J1468 PERF-A-TAPE Joint Compound per the following specifications.

IDENTIFICATION & PACKAGING

In standard 25 lb. PERF-A-TAPE Compound-Taping bags per 7-16-13-1. Formula letter coding to be TW after plant code.

FINISHED PRODUCT SPECIFICATIONS

1. Color: natural gray-white.
2. Consistency: 93 to 98 cc for 525 Brabender using test method per Bulletin 61-2-22.
3. Moisture: to be less than 1.2% as packed.
4. Odor (wet mix): characteristic, relatively mild.
5. Application: comparable to batches of this compound already made at South Gate.
6. Bond to tape: 6 or 7 when the application is dried at relative humidities below 50%.
7. Rewet test: #1 grading, for 5 minute soak with 70° F water.
8. Ph: 8.0 to 8.5
9. Lumps: per bulletin 61-2-22.

- 0 -

GP007 1150

SPECIAL BULLETIN

Operating Division

PRODUCT PROCEDURE

Approved: X**CONFIDENTIAL**

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PERF-A-TAPE JOINT COMPOUND

SOUTH GATE

No. 61-2-22-121

Date 7-21-69

Page 2

Cancels NEW

Dated

FORMULAJ1468

Cassin	5.0 %
40 gal test Armour C-2 powdered bone glue	2.5
Milo flour	2.0
Marx alginate	.36
Ammonium oxalate	.6
Dowicide G	.2
7RFO2 asbestos	6.5
210 st'd grade asbestos	As req'd (approx. 3%)
FSOP mica	Per formula V
	(approx. 16%)
Marblewhite 325	To make 100%

RAW MATERIALS

All are standard paint plant raw materials in current use in other products except the C2 40 gal test powdered bone glue (from Armour & Co., Chicago).

END

DP007 1151

Operating Division

PRODUCT PROCEDURE

Approved: 

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PERF-A-TAPE JOINT COMPOUND

No. 61-2-26-4-1

Date 11-28-69

Page 2

Cancels NEW

Dated

ALL PURPOSE (AP-343) - GYPSUM

FORMULA

AP-343

Casein FG	4.5%
Natrosol SG-61	0.8
Zinc Oxide	0.1
Ammonium Oxalate	1.0
Ammonium Pentaborate	1.2
Dicyandiamide	0.3
Hydrated Lime	About 0.15 (As Req'd)
P-85 Mica	Formula V
TRFO2 Asbestos	About 4.0 (As Req'd)
TSPP	0.1
#9NCS	To Make 100%

RAW MATERIALS

Per Bulletin 61-2-23.

MANUFACTURING PROCEDURE

Per Bulletin 61-2-23.

END

0P009 0355

Operating Division PRODUCT PROCEDURE		CONFIDENTIAL DO NOT REPRODUCE OR COPY		No. 61-2-22 Date 5-25-70 Page 5	
Approved: <i>[Signature]</i>		PERF-A-TAPE JOINT COMPOUNDS TAPING		Cancels Page 5 Dated 5-15-67	

	Gypsum J615C	New Brighton J-1304C	South Gate J1066
Casolin	3.5	3.5	7.0
Refined Soy Protein	4.0	4.0	-
Ammonium Oxalate	1.2	1.2	1.1
Sodium Pentachlorophenate	-	-	0.3
Ammonium Pentaborate	1.2	1.2	-
Ammonium Arginate - (Note 2)	0.3	0.3	0.3
Hydrated Lime	0-0.15	0-0.15	0.1-0.2
Dicystalline	0.5	0.5	1.0
Asbestos Flocks - (Note 3)	As Req.	As Req.	As Req.
Serfite Mica - (Note 4)	15.0	15.0	15.0
Whiting - (Note 5)	15.0	-	-
Mica J. C. - (Note 6)	Formula V	Formula V	Formula V
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
WPG-1200 (Note 8)	0.150	0.150	0.150
Neutralizer 2500 - (Note 8)	0.003	0.003	0.003

No. 61-2-22
Date 5-25-70
Page 6
Cancels Page 6
Dated 5-15-67

CONFIDENTIAL

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PERF-A-TAPE JOINT COMPOUNDS
EXPIRE

JOINT COMPOUND FORMULAS (Cont'd)

	Dallas J-1193	Montreal Hagersville J-1169B	Chamblee J-1062A
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	-	0.3	0.3
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyandiamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	As Req.	As Req.	As Req.
Sericite Mica - (Note 4)	10.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
Excello Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
PPG-1200 (Note 8)	0.150	0.150	0.100
Tributyl Phosphate (Note 8)	-	-	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	0.3	-	-
Mica P 80 F	Formula V	-	-

FORMULA NOTES

Note 1- J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2- Gypsum and New Brighton may use 0.225% Protamon "S" Alginate in place of 0.3% Marex Alginate. South Gate May use either Marex Ammonium Alginate or Kelsize LV Sodium Alginate in J1066 Compound.

OP010 0194

Operating Division
PRODUCT PROCEDURE

PERF-A-TAPE JOINT COMPOUND -
ALL PURPOSE

No. 61-2-26-2
Date 5-25-70
Page 1

Approved: *[Signature]*

CHAMBLEE

Cancels Page 1
Dated 5-18-67

Chamblee to manufacture All-Purpose Joint Compound per the following specifications.

Formula AP-12

Casein	5.5
Ammonium Alginate	0.7
Ammonium oxalate	1.6
Hydrated lime	As required for pH (app. 0.1)
Ammonium pentaborate	1.2
Dicyandiamide	1.0
7RFO2 Asbestos	(app. 8.5)
Mica J.C.	0.6 formula V
DXW Mineralite	15.0
No. 9 NCS	To make 100%
Liquid Mix	0.153
PPG-1200	0.100
Tributyl Phosphate	0.050
Neutralizer #50-50	0.003

RAW MATERIALS Same as listed under 61-2-22 and 61-2-23.

FINISHED PRODUCT TESTS

Consistency: 65-69 cc (67 preferred) at a 530 $\pm$ 25 Brabender Reading on VC-3 Brabender at 77°F.

pH 8.1 - 8.5

Other tests as per Bulletin 61-2-22.

PACKAGING: Use "All Purpose Joint Compound" bags as per layout 7-16-13-1.

SHIPMENT As per Bulletin 61-1-12.

Memphis Formula - To be shipped on all orders for Casein Junt or All Purpose for Memphis area only.

Operating Division

PRODUCT PROCEDURE

Approved: *[Signature]*

CONFIDENTIAL

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PERF-A-TAPE DUAL PURPOSE COMPOUND
HAGERSVILLE AND MONTREAL

No. 61-2-26-1
Date 5-25-70
Page 3
Cancels Page 3
Dated 12-18-69

FORMULA

AP-4

Montreal Casein	5.5
Ammonium Alginate*	0.7
Ammonium Oxalate	1.0
Ammonium Pentaborate	1.2
Dicyandiamide	1.0
Hydrated Lime	As required - approx. 0.1%
JM7RF02	As required to give a normal consistency (7.0% in Lab. Batches) (Use 0.6 Formula V Value)
Ashville Mica (P-80F)	15.0
M-4 Talc	15.0
FF Limestone	To Make 100%
A Dolomite or Stonelite (See Note 1)	0.15
Ferrite Yellow	0.153
Liquid Mix	
PPG-1200	0.150
Neutralizer 5050	0.003

* Marex, Collatex AS/KK. Hagersville Only, may use Marex or Protan Alginate 512.

Note 1: Montreal Only - May use Pulpro White #1 per FMS C6-24-18 in place of A Dolomite or Stonelite.

RAW MATERIALS

Stonelite per FMS 6-24-2; all others are the same as listed under Bulletin 61-2-22. Hagersville Only - Protan Alginate 512 or Marex.

MANUFACTURING PROCEDURE

Same as present PERF-A-TAPE Compounds.

0200 6000

END

Operating Division	PERF-A-TAPE JOINT COMPOUND	No. 01-2-26-4
PRODUCT PROCEDURE	ALL PURPOSE	Date 6-2-70
Approved:		Page 1
		Cancels Page 1
		Dated 8-23-67

DESCRIPTION

A PERF-A-TAPE All Purpose Compound

MANUFACTURING PLANT

Gypsum and Midway

IDENTIFICATION AND PACKAGING

25 Pound

Per Bulletin 7-16-13-3. After code add letter D for Detroit.

Other specifications per Bulletin 01-2-22.

M-5791 1/63 (Printed in U.S.A.)

C Indicates Change D Indicates Deletion

7P309 0313

No. 61-2-26-4
Date 6-2-70
Page 2

PEPF-A-TAPE JOINT COMPOUND - ALL PURPOSE

Cancels Page 2
Dated 5-18-67

FINISHED PRODUCT SPECIFICATIONS

Consistency - 66 to 69 cc at 530 ± 30 VC-3 orabender units at 77°F, using a pin paddle and a viscometer having a 75 rpm spindle speed and a 250 centimeter-gram torsion head.

Bond 5 minimum

Reduction Time - should not exceed 5 min. at 77°F.

pH - 8.1 to 8.5

Moisture - Not to exceed 0.2%

Color - Normally pigmented to match Manila Cheetrock paper but may be made unpigmented at Merchandise request.

- 0 -

Operating Division

PRODUCT PROCEDURE

Approved:

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PERT-A-TAPE DUAL PURPOSE COMPOUND

No. 61-2-24-11
Date 6-2-70
Page 3
Cancels Page 3
Dated 2-24-66

FORMULA

AP-97

100 Mesh Unoiled Casein	5.0
Protatek Alginate (A-155)	0.7
Ammonium Pentaborate	1.2
Ammonium Oxalate	1.0
Tetra Sodium Pyrophosphate	0.25
Hydrated Lime	about 0.15 as req'd for normal pH
Dicyandiamide	1.0
Mica JC	0.6 formula "
Ser-X or Marvon CE-F-1	15.0
750 Marble (Note 1)	to make 100%
Ferrite Yellow	about 0.1% to match Sheetrock color
Liquid Mix	0.153
JM7RF02	8.0% - as req'd for normal consistency

Note 1: Midway to use #9NCC per PMS 6-24-9.

RAW MATERIALS

Protatek (A-155) - Croda Inc.
Anhydrous Tetra Sodium Pyrophosphate - Monsanto Chemical Company
fine ground which should screen approx. - 92% through 70 mesh
66% through 100 mesh
Marvon CE-F-1 or Ser-X - per PMS 6-14-2.

Other raw materials per Bulletin 61-2-23.

END

No. 61-2-22
Date 7-21-66
Page 6

Cancels Page 6
Dated 5-19-66

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PERF-A-TAPE JOINT COMPOUNDS

23

JOINT COMPOUND FORMULAS (Cont'd)

	Dallas J-1193	Montreal Hagersville J-1169B	Chamblee J-1062A
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
Ammonium Pentaborate	-	1.2	1.2
Ammonium Alginate	-	0.3	0.3
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
Dicyandiamide	1.0	1.0	0.5
Asbestos Floats - (Note 3)	as req'd	As Req.	As Req.
Sericite Mica - (Note 4)	10.0	-	15.0
Mica J.C. - (Note 6)	-	0.8 Form V	Formula V
Talc M-4	-	15.0	-
Excello Clay	-	-	5.0
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Polyglycol Pl200 (Note 8)	0.150	0.150	0.100
Tributyl Phosphate (Note 8)	-	-	0.050
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	0.3	-	-
Mica T	Formula V	-	-

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" alginate in place of 0.3% Marex Alginate. South Gate may use either Marex Ammonium Alginate or Kelsize LV Sodium Alginate in J1066 Compound.

Operating Division PRODUCT PROCEDURE		CONFIDENTIAL DO NOT REPRODUCE OR COPY PERF-A-TAPE JOINT COMPOUNDS		No. 61-2-22 Date 2-10-67 Page 5	
Approved: <i>JLB</i>				Cancels Page 5 Dated 5-19-66	

	Gypsum J815C	New Brighton J-1304C	South Gate J1066
Casein	3.5	3.5	7.0
Refined Soy Protein	4.0	4.0	-
Ammonium Oxalate	1.2	1.2	1.1
Sodium Pentachlorophenate	-	-	0.3
Ammonium Pentaborate	1.2	1.2	-
Ammonium Akginate - (Note 2)	0.3	0.3	0.3
Hydrated Lime	0-0.15	0-0.15	0.1-0.2
Dicyandiamide	0.5	0.5	1.0
Asbestos Floats - (Note 3)	As Req.	As Req.	As Req.
Sericite Mica - (Note 4)	15.0	15.0	15.0
Whiting - (Note 5)	15.0	-	-
Mica J. C. - (Note 6)	Formula V	Formula V	Formula V
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
Polyglycol P1200 (Note 8)	0.150	0.150	0.150
Neutralizer #5050 - (Note 8)	0.003	0.003	0.003

JOLIT COMPOUND FORMULAS

M-5791 -C 7/65 (Printed in U.S.A.)

C D

C Indicates Change D Indicates Deletion

9220 01000

Operating Division PRODUCT PROCEDURE Approved: <i>JS</i>	CONFIDENTIAL DO NOT REPRODUCE OR COPY PERF-A-TAPE JOINT COMPOUND ALL PURPOSES (AP 160B)	No. 61-2-26-7 Date 4-13-67 Page 3 Cancels Dated NEW																																																
FORMULA <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Fine ground, uncoated casein</td> <td style="width: 50%; text-align: right;">5.0%</td> </tr> <tr> <td>Marex alginate</td> <td style="text-align: right;">.3</td> </tr> <tr> <td>Tylose UM 4000P</td> <td style="text-align: right;">.3</td> </tr> <tr> <td>Ammonium pentaborate</td> <td style="text-align: right;">1.2</td> </tr> <tr> <td>Dicyandiamide</td> <td style="text-align: right;">.8</td> </tr> <tr> <td>Tetra sodium pyrophosphate</td> <td style="text-align: right;">.2</td> </tr> <tr> <td>Zinc oxide</td> <td style="text-align: right;">.2</td> </tr> <tr> <td>-200 mesh Bentonite</td> <td style="text-align: right;">1.5</td> </tr> <tr> <td>Mica F80F</td> <td style="text-align: right;">1.2 x formula V</td> </tr> <tr> <td>JM 7RFU2 Asbestos</td> <td style="text-align: right;">As required for normal consistency -</td> </tr> <tr> <td></td> <td style="text-align: right;">Approx. 2%.</td> </tr> <tr> <td>PC 7RF9 Asbestos</td> <td style="text-align: right;">2.0</td> </tr> <tr> <td>Calcium Carbonate</td> <td style="text-align: right;">To make 100%</td> </tr> </table> RAW MATERIALS <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">F. G. Casein</td> <td style="width: 50%;">Per PMS. 6-26-4</td> </tr> <tr> <td>Marex Alginate</td> <td style="text-align: right;">6-8-1</td> </tr> <tr> <td>Tylose Methylcellulose</td> <td style="text-align: right;">6-25-5</td> </tr> <tr> <td>Ammonium Pentaborate</td> <td style="text-align: right;">6-74-2</td> </tr> <tr> <td>Dicyandiamide</td> <td style="text-align: right;">6-44-1</td> </tr> <tr> <td>Tetra Sodium Pyrophosphate</td> <td style="text-align: right;">6-177-4</td> </tr> <tr> <td>Zinc Oxide</td> <td style="text-align: right;">6-94-93</td> </tr> <tr> <td>Bentonite</td> <td style="text-align: right;">6-36-4</td> </tr> <tr> <td>Mica</td> <td style="text-align: right;">Bulletin 58-61-1</td> </tr> <tr> <td>Asbestos, 7RF-1 & 7RF-9</td> <td style="text-align: right;">6-14-5</td> </tr> <tr> <td>Carbonate Filler</td> <td style="text-align: right;">6-24-1</td> </tr> </table> MANUFACTURING PROCEDURE Mix and micropulverize per Bulletin 61-2-22. End 0P009 0411			Fine ground, uncoated casein	5.0%	Marex alginate	.3	Tylose UM 4000P	.3	Ammonium pentaborate	1.2	Dicyandiamide	.8	Tetra sodium pyrophosphate	.2	Zinc oxide	.2	-200 mesh Bentonite	1.5	Mica F80F	1.2 x formula V	JM 7RFU2 Asbestos	As required for normal consistency -		Approx. 2%.	PC 7RF9 Asbestos	2.0	Calcium Carbonate	To make 100%	F. G. Casein	Per PMS. 6-26-4	Marex Alginate	6-8-1	Tylose Methylcellulose	6-25-5	Ammonium Pentaborate	6-74-2	Dicyandiamide	6-44-1	Tetra Sodium Pyrophosphate	6-177-4	Zinc Oxide	6-94-93	Bentonite	6-36-4	Mica	Bulletin 58-61-1	Asbestos, 7RF-1 & 7RF-9	6-14-5	Carbonate Filler	6-24-1
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Operating Division
PRODUCT PROCEDURE

CONFIDENTIAL
DO NOT REPRODUCE OR COPY

No. 61-2-22
Date 6-2-70
Page 5

Approved: *[Signature]*

PEAT-A-TAPE JOINT COMPOUNDS
TAPING

Cancels Page 5
Dated 5-25-70

JOINT COMPOUND FORMULAS

	Midway & Gypsum J015C	New Brighton J-13047	South Gate J1065
Caselin	3.5	3.5	7.0
Refined Soy Protein	4.0	4.0	-
Ammonium Oxalate	1.2	1.2	1.1
Sodium Pentachlorophenate	-	-	0.3
Ammonium Pentaborate	1.2	1.2	-
Ammonium Arginate - (Note 2)	0.3	0.3	0.3
Hydrated Lime	0-0.15	0-0.15	0.1-0.2
Diethylene Glycol	0.5	0.5	1.0
Asbestos Filler - (Note 3)	As Req.	As Req.	As Req.
Sericite Filler - (Note 4)	15.0	15.0	15.0
Whiting - (Note 5)	15.0	-	-
Mica J. C. - (Note 6)	Formula V	Formula V	Formula V
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
PPG-1200 (Note 8)	0.150	0.150	0.150
Neutralizer 50% - (Note 8)	0.003	0.003	0.003

A Indicates Addition

Originally issued 7-21-69

SPECIAL BULLETIN

1st Extension

Operating Division	PERF-A-TAPE JOINT COMPOUND SOUTH GATE	No.	61-2-22-224
PRODUCT PROCEDURE		Date	7-7-70
Approved:		Page	1
		Cancels Page 1	Dated 7-21-69

C This bulletin expires 7-1-71.

South Gate plant to manufacture and ship, for field trials and shipments as directed by P. B. Thompson — LA#961, J1468 PERF-A-TAPE Joint Compound per the following specifications.

IDENTIFICATION & PACKAGING

In standard 25 lb. PERF-A-TAPE Compound-Taping bags per 7-16-13-1. Formula letter coding to be TW after plant code.

FINISHED PRODUCT SPECIFICATIONS

1. Color: natural gray-white.
2. Consistency: 93 to 98 cc for 525 Brabender using test method per Bulletin 61-2-22.
3. Moisture: to be less than 1.2% as packed.
4. Odor (wet mix): characteristic, relatively mild.
5. Application: comparable to batches of this compound already made at South Gate.
6. Bond to tape: 6 or 7 when the application is dried at relative humidities below 50%.
7. Rust test: #1 grading, for 5 minute soak with 70° F water.
8. Ph: 8.0 to 8.5
9. Lumps: per bulletin 61-2-22.

- 0 -

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE Approved: <i>[Signature]</i>	CONFIDENTIAL DO NOT REPRODUCE OR COPY PERF-A-TAPE JOINT COMPOUND SOUTH GATE	No. 61-2-22-144 Date 7-7-70 Page 2 Cancels Page 2 Dated 7-21-69
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FORMULA

	<u>JL468</u>
Casein	5.0 %
C *Low gel test powdered bone glue.	2.5
Milo flour	2.0
Marx alginate	.36
Ammonium oxalate	.6
Dowicide G	.2
7RFO2 asbestos	6.5
210 st'd grade asbestos	As req'd (approx. 3%)
F80F mica	Per formula V
	(approx. 16%)
Marblewhite 325	To make 100%

RAW MATERIALS

All are standard paint plant raw materials in current use in other products except the powdered bone glue.

A *South Gate may use either of the following:

1. Darling & Co. 30-80 gel powd. bone glue.
2. Armour & Co. CX powd. bone glue.

Of these two, #1 is slightly preferred based on odor and working properties.

- END

Originally issued 7-21-69

SPECIAL BULLETIN

1st Extension

Operating Division	PERF-A-TAPE JOINT COMPOUND SOUTH GATE	No. 61-2-22-1M
PRODUCT PROCEDURE		Date 9-1-70
Approved:		Page 1
		Cancels Page 1 Dated 7-7-70

This bulletin expires 7-1-71.

South Gate plant to manufacture and ship, for field trials and shipments as directed by P. B. Thompson — LA/961, J1468 PERF-A-TAPE Joint Compound per the following specifications.

IDENTIFICATION & PACKAGING

In standard 25 lb. PERF-A-TAPE Compound-Taping bags per 7-16-13-1. Formula letter coding to be TW after plant code.

FINISHED PRODUCT SPECIFICATIONS

1. Color: natural gray-white.
2. Consistency: 80 to 85 cc for 525 Brabender using test method per Bulletin 61-2-22.
3. Moisture: to be less than 1.2% as packed.
4. Odor (wet mix): characteristic, relatively mild.
5. Application: comparable to batches of this compound already made at South Gate.
6. Bond to tape: 6 or 7 when the application is dried at relative humidities below 50%.
7. Retest test: #1 grading, for 5 minute soak with 70° F water.
8. Ph: 8.0 to 8.5
9. Lumps: per bulletin 61-2-22.

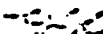
- 0 -

EXPIRED 7-1-71

SPECIAL BULLETIN

Operating Division

PRODUCT PROCEDURE

Approved: **CONFIDENTIAL**

DO NOT REPRODUCE OR COPY

PERT-A-TAPE JOINT COMPOUND
SOUTH GATE

No. 61-2-22-MM

Date 9-1-70

Page 2

Cancels Page 2

Dated 7-7-70

FORMULAJ1468

Casein	5.0 %
Darling 30-80 Glue	2.5
Milo flour	2.0
Marex alginate	.36
Ammonium oxalate	.6
Dovicide G	.2
7RFO2 asbestos	6.0
210 st'd grade asbestos	As req'd (approx. 1.5%)
P80F mica	Per formula V (approx. 16%)
Marblewhite 325	To make 100%

RAW MATERIALS

All are standard paint plant raw materials in current use in other products except the Darling 30-80 glue.

END

Operating Division	PERF-A-TAPE TOPPING COMPOUND (JF-582)	No. 61-2-23-6
PRODUCT PROCEDURE		Date 3-30-71 Page 1
Approved: <i>[Signature]</i>		Cancels Page 1 Dated 3-9-71

DESCRIPTION

A topping compound for PERF-A-TAPE with superior mixing properties (with much less tendency to over-dilute in cold water), lower shrinkage, and generally equal bond strength to Dual-Purpose Compounds, when used over metal bead or trim.

MANUFACTURING PLANTS

Chamblee, Dallas, Gypsum, Midway and New Brighton

IDENTIFICATION AND PACKAGING

25 lb. P-A-T Topping Compound bag; layout 7-16-13-2 (2/MIL P.E. VP Barrier).

Under the code there should be a statement to the effect that "THIS PRODUCT MAY BE USED DIRECT OVER USG METAL BEAD".

Shipping Instructions

To be shipped on all orders for ES topping compound.

Shipments to Florida are to be made only with approval of Department 981.

Gypsum - On any order for "ES" Topping Compound, the following formula must be shipped.

Bags of pigmented "ES" topping for Fleming Materials are to be identified by printing the word "pigmented" over the code number.

Chamblee - Authority to ship for field trials and subsequent shipments per direction of #981 - Product Mgr. for Southern Construction Products Division.

CODING

Regular-code to be followed by letters "ES" for all shipments, depending on what is ordered.

Operating Division

PRODUCT PROCEDURE

Approved: *[Signature]*

CONFIDENTIAL

DO NOT REPRODUCE OR COPY

PERF-A-TAPE TOPPING COMPOUND (JF-582)

No. 61-2-23-6

Date 3-30-71

Page 3

Cancel Page 3

Dated 3-9-71

FORMULA

JF-582

	Casein, PG uncoiled	3.5
C	Natrosol SG-68 (Note 2)	0.8
	Zinc Oxide	0.1
	Ammonium Oxalate	0.8
	Ammonium Pentaborate	1.2
	Dicyandiamide	0.3
	Hydrated Lime	(As Required)
	P-85 Mica (Note 1)	Formula V
	JF-7RFO2	(As Required - About 4%)
	TSPP	0.1
	Carbonate Filler (#9NCS)	To make 100%
	Ferrite Yellow*	0.1 Approx.

* Omit Ferrite Yellow on all orders for Dual Purpose Compound.

C Note 1: Dallas and New Brighton to use P80F Mica in place of P85 Mica.
A Note 2: New Brighton to use Natrosol 250 KK.

RAW MATERIALS

Per 61-2-23 and:

Natrosol SG-68

Per PMS 6-151-13

End

Operating Division
PRODUCT PROCEDURE

Approved: *[Signature]*

CONFIDENTIAL

DO NOT REPRODUCE OR COPY

PERT-A-TAPE TOPPING COMPOUND

No. 61-2-23
Date 4-8-71
Page 3

Cancels Page 3
Dated 3-9-71

FORMULAS

	JF-418C	JF 254	JF 200	JF 185
	New Brighton	Montreal Hageraville	South Gate	Chamblee Gypsum New Brighton
Casein	2.5	1.75	3.0	2.5
Soy Protein	3.0	-	2.5	2.25
Argonitum Alginate (Note 6)	0.8	0.8	0.8	0.8
Hydrated Lime	As Req.	As Req.	As Req.	As Req.
Am. onium Oxalate (Note 7)	1.0	1.0	1.0	1.0 **
Sodium Pentachlorophenate	-	-	0.2	-
Argonitum Pentaborate	1.2	1.2	-	1.2
Dicyandiamide	0.3	1.0	0.3	0.3
Mica J.C.	Formula V	0.6 Formula V	Formula V	Formula V*
Mica P-85	-	-	-	0.6
(balls use P-80R)				Formula V
SG-61				
Zinc Oxide (#42 green label)				
Tetra sodium pyrophosphate (Fine ground)				
Asbestos - (Note 1)	As Req.	As Req.	As Req.	As Req.
Mica Sericite - (Note 2)	15.0	-	15.0	15.0
Whiting - (Note 5)	-	15.0	-	-
Talc	-	15.0	-	-
PPG-1200 (Note 3)	0.150	0.150	0.150	0.150
Neutralizer 5050 - (Note 3)	0.003	0.003	0.003	0.003
Carbonate Filler - (Note 4)	To Make 100%	To make 100%	To Make 100%	To Make 100%
Pigments	Pigment with Ferrite Yellow and Other Lime Proof Colors as Required			

* New Brighton Only

** New Brighton to use 1.2

C Indicates Change 551 200du

A Indicates Addition

Operating Division

PRODUCT PROGRAM

Approved: *[Signature]*

CONFIDENTIAL

DO NOT REPRODUCE OR COPY

No. 01-2-71-1
Date 6-2-71
Page 3
Cancels Page 1
Listed 4-13-67

PER-A-TAPE JOINT COMPOUND
ALL PURPOSE (AP 160B)

FORMULA

	Fine ground, uncoated casein	5.0%
	Marex alginate	.3
C	GM 65 Thickener	.3
	Ammonium pentaborate	1.2
	Dicyandiamide	.8
	Tetra sodium pyrophosphate	.2
	Zinc oxide	.2
	-200 mesh Bentonite	1.5
	Mica P80F	1.2 x Formula V
	JM 7RF02 Asbestos	As required for normal consistency - approx. 2%
C	UC-210 Asbestos	1.4%
	Calcium Carbonate	To make 100%

RAW MATERIALS

	F. G. Casein	Per PMS. 6-26-4
	Marex Alginate	6-8-1
C	GM 65 Thickener	Dow Chemical Co.
	Ammonium Pentaborate	6-74-2
	Dicyandiamide	6-44-1
	Tetra Sodium Pyrophosphate	6-177-4
	Zinc Oxide	6-94-93
	Bentonite	6-36-4
	Mica	Bulletin 58-61-1
C	UC-210 Asbestos	6-14-11
	Carbonate Filler	6-24-1

MANUFACTURING PROCEDURE

Mix and mikropulverize per Bulletin 61-2-22.

End

07009 0404

Operating Division
PRODUCT PROCEDURE

CONFIDENTIAL

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No. 4-30-71
Date 4-30-71
Page 3
Cancels Page 2
Dated 6-27-68

Approved:

PERF-A-TAPE JOINT COMPOUND - TOPPING
(JF448D) - SOUTH GATE

FORMULA

JF448D

Casein, fine grind uncoiled	4.0%
SG-61*	.8
Dicyandiamide	.3
Ammonium pentaborate	1.2
Ammonium oxalate	0.50%
Tetra sodium pyrophosphate	.1
Zinc oxide	.2
UC-210 Asbestos	1.4%
Johns-Manville 7RFO2 Asbestos as req'd for st'd consistency	(3% in lab. batches)
WMC P-85 Mica	0.8 formula V value (about 14%)
Marble White 325	To Make 100%
Pigment	As Required

* Summer formula to use SG 67.

RAW MATERIALS

Per Bulletin 61-2-23 with the addition of SG-61 or SG-67 per PMS 6-151-6.
UC-210 Asbestos Per PMS 6-14-11

MANUFACTURING PROCEDURE

Per Bulletin 61-2-23. Note - No liquid mix is used in JF448D.

End

Operating Division	CONFIDENTIAL	No.	61-2-26-2
PRODUCT PROCEDURE		Date	9-24-71
Approved: <i>gix</i>		Page	1
		Cancels	Page 1
		Dated	5-25-70

PERF-A-TAPE JOINT COMPOUND -
- ALL PURPOSE - CHAMBLEE

Chamblee to manufacture All-Purpose Joint Compound per the following specifications.

Formula AP-12

Casein	5.5
Ammonium Alginate	0.7
Ammonium Oxalate	1.6
Hydrated Lime	As required for pH (app. 0.1)
Ziram, 95% Tech., Grade	0.15
TRFO2 Asbestos	(app. 8.5)
Mica J.C.	0.6 Formula V
DXW Mineralite	15.0
No. 9 NCS	To make 100%
Liquid Mix	0.153
PPG-1200	0.100
Tributyl Phosphate	0.050
Neutralizer #50-50	0.003

RAW MATERIALS

Same as listed under 61-2-22 and 61-2-23.

FINISHED PRODUCT TESTS

Consistency: 65-69 cc (67 preferred) at 530 $\pm$ 25 Brabender Reading on
VC-3 Brabender at 77°F.
pH 8.1 - 8.5
Other tests as per Bulletin 61-2-22.

PACKAGING:

Use "All Purpose Joint Compound" bags as per layout 7-16-13-1.

SHIPMENT

As per Bulletin 61-1-12.

Memphis Formula - To be shipped on all orders for Casein Dual or All
Purpose for Memphis area only.

END

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C-5791-C 1/68 (Printed in U.S.A.) C Indicates Change D Indicates Deletion

0P009 0241

Operating Division		CONFIDENTIAL PEPF-A-TAPE TOPPING COMPOUND (JF-582)	No. 61-2-23-6
PRODUCT PROCEDURE			Date 9-24-71
Approved: <i>[Signature]</i>			Page 3
			Cancels Page 3 Dated 3-30-71

FORMULA		JF-582				
	Casein, FG unoiled	3.5				
	Natrosol SG-68 (Note 2)	0.8				
	Zinc Oxide	0.1				
	Ammonium Oxalate	0.8				
C	Ammonium Pentaborate (Note 3)	1.2				
C	Dicyandiamide (Note 3)	0.3				
	Hydrated Lime	(As Required)				
	P-85 Mica (Note 1)	Formula V				
	JF-7RFQ2	(As Required - About 4%)				
	TSPF	0.1				
	Carbonate Filler (#9NCS)	To make 100%				
	Ferrite Yellow*	0.1 Approx.				
* Omit Ferrite Yellow on all orders for Dual Purpose Compound. Note 1: Dallas and New Brighton to use P80F Mica in place of P85 Mica. Note 2: New Brighton to use Natrosol 250 KK. Note 3: Chamblee to use 0.15% ZIRAM (95% Tech grade) in place of 1.2% Ammonium Pentaborate and 0.3% Dicyandiamide.						
<u>RAW MATERIALS</u> Per 61-2-23 and: <table border="0" style="width: 100%;"> <tr> <td style="width: 40%;">Natrosol SG-68</td> <td>Per PMS 6-151-13</td> </tr> <tr> <td>Ziram (95% Tech. Grade)</td> <td>Per PMS 6-100-11</td> </tr> </table>			Natrosol SG-68	Per PMS 6-151-13	Ziram (95% Tech. Grade)	Per PMS 6-100-11
Natrosol SG-68	Per PMS 6-151-13					
Ziram (95% Tech. Grade)	Per PMS 6-100-11					

END

No. 61-2-22
 Date 9-24-71
 Page 6
 Cancels Page 6
 Dated 12-3-70

CONFIDENTIAL

PERF-A-TAPE JOINT COMPOUNDS TAPING

JOINT COMPOUND FORMULAS (Cont'd)

	Dallas J-1193	Montreal Hagersville J-1169B	Chamblee J-1062A
Casein	6.5	6.8	3.5
Refined Soy Protein	-	-	4.0
Ammonium Oxalate	1.1	1.2	1.2
Sodium Pentachlorophenate - (Note 1)	0.3	-	-
C Ammonium Pentaborate -	-	1.2	-
Ammonium Alginate	-	0.3	0.3
Hydrated Lime	0.2 approx.	0.1-0.2	0.1-0.3
C Dicyandiamide	1.0	1.0	-
Asbestos Floats - (note 3)	As Req.	As Req.	As Req.
Sericite Mica - (Note 4)	10.0	-	15.0
Mica J.C. - (Note 6)	0.8 Form V	Formula V	-
Talc M-4	-	15.0	-
Excello Clay	-	5.0	-
Carbonate Filler - (Note 7)	To Make 100%	To Make 100%	To Make 100%
PPG-1200 (Note 8)	0.150	0.150	0.100
Tributyl Phosphate (Note 8)	-	-	0.050
Neutralizr #5050 - (Note 8)	0.003	0.003	0.003
Sodium Alginate	0.3	-	-
Mica P 80 F	Formula V	-	-
A Ziram, 95% Tech. Grade	-	-	0.15

FORMULA NOTES

Note 1 - J1193 - For shipments into the Southeast Division and Houston District the Sodium Pentachlorophenate is to be increased to 0.4%. All five pound boxes of compound and 60 foot Perf-A-Tape, with or without knives, are to be made with 0.3% Sodium Pentachlorophenate.

Note 2 - Gypsum and New Brighton may use 0.225% Protamon "S" Alginate in place of 0.3% Marex Alginate. South Gate may use either Marex Ammonium Alginate or Kelsize LV Sodium Alginate in J1066 Compound.

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C-5791-C (Back)

C Indicates Change A Indicates Addition

DP010 0172

Originally issued 7-21-69

SPECIAL BULLETIN

2nd Extension

Operating Division

PRODUCT PROCEDURE

Approved:

CONFIDENTIAL

PERF-A-TAPE JOINT COMPOUND
SOUTH GATE

No. 61-2-22-MM
Date 2-28-72
Page 1
Cancels Reinstatement
Dated

This bulletin expires 1-1-73.

South Gate plant to manufacture J1468 PERF-A-TAPE Joint Compound per the following specifications. Shipments to be directed by P.B. Thompson, LA #961.

IDENTIFICATION & PACKAGING

In standard 25 lb. PERF-A-TAPE Compound-Taping bags per 7-16-13-1. Formula letter coding to be TW after plant code.

FINISHED PRODUCT SPECIFICATIONS

1. Color: natural gray-white.
2. Consistency: 80 to 85 cc for 525 Brabender using test method per Bulletin 61-2-22.
3. Moisture: to be less than 1.2% as packed.
4. Odor (wet mix): characteristic, relatively mild.
5. Application: comparable to batches of this compound already made at South Gate.
6. Bond to tape: 6 or 7 when the application is dried at relative humidities below 50%.
7. Retest test: #1 grading, for 5 minute soak with 70°F water.
8. pH: 8.0 to 8.5
9. Lumps: per Bulletin 61-2-22.

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O-5791-C 1/68 (Printed in U.S.A.) T

0P007 1141

No. 61-2-22-MM
Date 2-28-72
Page 2
Cancels Reinstatement
Dated

CONFIDENTIAL

PERF-A-TAPE JOINT COMPOUND
SOUTH GATE

FORMULA

J1468

Casoin	5.0%
Darling 30-80 Glue	2.5
Milo flour	2.0
Marx alginate	.36
Ammonium oxalate	.6
TRPO2 asbestos	6.0
210 st'd grade asbestos	As req'd (approx. 1.5%)
P80P mica	Per formula V (approx. 16%)
Marblewhite 325	To make 100%
Ziram - 95% Tech. Grade	0.15

RAW MATERIALS

All are standard paint plant raw materials in current use in other products except the Darling 30-80 glue. See 61-2-22.

END

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0-5791-C (Back)T

NP007 1142

Operating Division

PRODUCT PROCEDURE

Approved:

CONFIDENTIAL

PERF-A-TAPE JOINT COMPOUND
ALL PURPOSE (AP 160B)

No. 61-2-26-7

Date 2-28-72

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Dated 6-2-71

FORMULA

Fine ground, uncoated casein	5.0%
Marex alginate	.3
GM 65 Thickener	.3
Ziram	0.15
Tetra sodium pyrophosphate	.2
Zinc oxide	.2
-200 mesh Bentonite	1.5
Mica P80F	1.2 x Formula V
JM 7RF02 Asbestos	As required for normal consistency - approx. 2%
UC-210 Asbestos	1.4
Calcium Carbonate	To make 100%

RAW MATERIALS

F. G. Casein	Per PMS. 6-26-4
Marex Alginate	6-8-1
GM 65 Thickener	Dow Chemical Co.
Tetra Sodium Pyrophosphate	6-177-4
Zinc Oxide	6-94-93
Bentonite	6-36-4
Mica	Bulletin 58-61-1
UC-210 Asbestos	6-14-11
Carbonate Filler	6-24-1
Ziram 95% Tech Grade	6-100-11

MANUFACTURING PROCEDURE

Mix and mikropulverize per Bulletin 61-2-22.

END

7P009 0413

Operating Division PRODUCT PROCEDURE Approved:	CONFIDENTIAL PERF-A-TAPE JOINT COMPOUND TOPPING	No. 61-2-23 Date 3-9-72 Page 1 Cancels Page 1 Dated 3-9-71
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DESCRIPTION

Smooth Applying, easy sanding compound designed for finish coats only in finishing PERF-A-TAPE joints. Supplied unpigmented on specific sales order.

MANUFACTURING PLANTS

C Chamblee, Gypsum, Hagersville, South Gate, and Montreal.

IDENTIFICATION AND PACKAGING

- D
- JF 254 - 25 lb. PERF-A-TAPE Joint Compound - Topping Bag; Canadian Only Layout 8-103-3.
 - JF 200 - 25 Lb. PERF-A-TAPE Joint Compound - Topping Bag; Layout 7-16-13-2.
 - JF 185 - 25 Lb. PERF-A-TAPE Joint Compound - Topping Bag; Layout 7-16-13-2.

SHIPPING DISTRIBUTION

Per Bulletin 61-1-12.

FINISHED PRODUCT SPECIFICATIONS

Color

Unpigmented (natural white) topping compound to be shipped when sales orders so specify - identify with word "white" printed under or over the code number. Otherwise all topping compound to be tinted to match standard sample from Research - approximately to match SHEETROCK manila color. The .05% ferrite color is to be discontinued. South Gate to remain at their current degree of pigmentation, as of April 1, 1959.

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CONFIDENTIAL

PERF-A-TAPE JOINT COMPOUND
TOPPING

FINISHED PRODUCT SPECIFICATIONS (Cont'd)

Mixing and Application Properties - To duplicate those of a standard sample to be supplied by the Research Laboratory.

Cracking - Should show no edge or check cracking in the normal bond test dried in the hot room.

Lumps - Screen 100 grams of the dry powder on a 30 mesh screen. All should pass through readily except for small amounts of asbestos. If lumps are present, examine to determine what they are, and take any steps necessary to eliminate them.

Consistency - The mixed compound is to have the specified Brabender reading using the pin paddle, one hour after mixing at a temperature of 77°F.

JF 185 650 BB 65 to 68 cc (Normal 66 cc) (Chamblée)
JF 185 430-630 BB at 67 cc (Gypsum Only)
JF 200 650 BB 66 to 69 cc (Normal 67 cc)
JF 254 360-560 BB at 61 cc

Direct reading on C. W. Brabender Visco Corder with 250 gm. head, pin paddle, and 75 RPM speed.

pH - Determine 30 minutes after mixing, temperature of mixed compound to be 77°F. during the 30 minutes.

8.2 to 8.7 ideal 8.4 to 8.5

Bond to Tape - Normally 2 to 4 when dried in an atmosphere below 50% RH for 18 hours. Lower at higher humidities. See page 6 for Bond Scale.

Revet Test - Normally about 1 for all formulas.

Odor of Wet Mixed Compound - To be of same general character and no stronger than that of a standard sample of the same compound on standing a similar length of time after mixing with water.

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Operating Division

PRODUCT PROCEDURE

Approved:

CONFIDENTIALPERF-A-TAPE JOINT COMPOUND
TOPPING

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FORMULAS

	JF 254 Montreal Hagersville	JF 200 South Gate	JF 185 Chamblee Gypsum
Casein	3.75	3.0	2.5
Soy Protein	-	2.5	2.25
Ammonium Alginate (Note 6)	0.8	0.8	0.8
Hydrated Lime	As Req.	As Req.	As Req.
Ammonium Oxalate (Note 7)	1.0	1.0	1.0
Sodium Pentachlorophenate	-	0.2	-
Ammonium Pentaborate	1.2	-	1.2
Dicyandiamide	1.0	0.3	0.3
Mica J.C.	0.6 Formula V	Formula V	Formula V
Mica P-85 (balls use P-80F)	-	-	0.6 Formula V
SG-61			
Zinc Oxide (#2 green label)			
Tetra sodium pyrophosphate (Fine ground)			
Asbestos - (Note 1)	As Req.	As Req.	As Req.
Mica Sericite - (Note 2)	-	15.0	15.0
Whiting - (Note 5)	15.0	-	-
Talc	15.0	-	-
PPG-1200 (Note 3)	0.150	0.150	0.150
Neutralizer 5050 - (Note 3)	0.003	0.003	0.003
Carbonate Filler - (Note 4)	To make 100%	To Make 100%	To Make 100%
Pigments	Pigment with Ferrite Yellow and Other Lime Proof Colors as Required		

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CONFIDENTIAL

PERF-A-TAPE JOINT COMPOUND
TOPPING

FORMULA NOTES

Note 1 - Asbestos used shall be as follows:

JF 254 - Johns Manville TRFO2
JF 200 - Phillip Carey TRF9
JF 185 - 2/3 Johns Manville TRFO2; 1/3 Phillip Carey TRF9 (Chamblee Only)
JF 185 - JMTTRFO2 (Gypsum)

Note 2 - Sericite Mica used shall be as follows:

Gypsum - Ser-X or Narvon CE-F-1
Chamblee - DXW Mineralite in white Topping; Ser-X or CE-F-1 in pigmented Topping
South Gate - M350 Sericite

Note 3 - Chamblee to replace .050 of PFG-1200 with .050 of Tributyl Phosphate. The PFG-1200 and neutralizer 5050 should be mixed together before adding to the other ingredients. In cold weather, this mixture may be thinned with a little isopropyl alcohol if necessary to facilitate its uniform dispersion among the powder ingredients. This mixture is to be spraykd into the other ingredients while they are being mixed in a Broughton mixer. If spray equipment is not used to add the liquid mix to the dry powders in the mixer, the tributyl phosphate must be increased to .1% (total liquid mix .203%) and the liquid mix dribbled slowly into the powder in the mixer.

Note 4 - Carbonate Fillers:

JF 254 - Bulletin 58-2-2, page 2 of 5, A or AA or PMS 6-24-2 or 6-24-17
JF 185 - PMS 6-24-9
JF 200 - PMS 6-24-1
Exception: Hagersville may use Pulpro White #1 and Montreal may use Stonelite or Pulpro White #1 in place of A Dolomite.
Stonelite per PMS 6-24-2, Pulpro White #1 per PMS C6-24-18.

Note 5 - Whiting:

JF 254 per PMS C6-24-6

Note 6 - Gypsum, and Montreal may substitute Collatex AS/KK Alginate in place of Marex Alginate. South Gate to use Sodium Alginate instead of Ammonium Alginate. Hagersville may use Marex or Protan Alginate 512 in place of Marex Alginate.

Note 7 - Chamblee Only, to use 1.1% Ammonium Oxalate.

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