



MATERIAL SAFETY DATA SHEET

MSDS NUMBER ▶

80,170-1 L

PAGE 1

97367 (4-85)

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE		
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819		
ACUTE HEALTH * + 3	FIRE 1	REACTIVITY 0	HAZARD RATING ▶ LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4		
*For acute and chronic health effects refer to the discussion in Section III					

BE SAFE
READ OUR PRODUCT
SAFETY INFORMATION
... AND
PASS IT ON
(PRODUCT LIABILITY LAW
REQUIRES IT)

SECTION I		NAME
PRODUCT ▶	PAINTED SCRAP METAL	
CHEMICAL NAME ▶	MIXTURE (SEE SECTION II A)	
CHEMICAL FAMILY ▶		
SHELL CODE ▶	MMMM	

PLAINTIFF'S EXHIBIT

SH-535

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	PAINTED SCRAP METAL	MIXTURE	100
1	METAL ALLOYS	MIXTURE	98->99
2	RESIDUAL PAINT/COATING WHICH MAY CONTAIN:	MIXTURE	<1-2
2A	IRON OXIDE	1309-37-1	.
2B	TITANIUM DIOXIDE	13463-67-7	.
2C	CALCIUM CARBONATE	1317-65-3	.
2D	SILICON DIOXIDE	7631-86-9	.
2E	LEAD	7439-92-1	.
2F	CHROMIUM	7440-47-3	.
2G	ASBESTOS FIBERS	1332-21-4	.

THIS MSDS ADDRESSES COMPONENT 2 ONLY. THE EXACT COMPOSITION OF COMPONENT 2 IS UNKNOWN. THE LISTED COMPONENTS ARE OR HAVE BEEN USED IN INDUSTRIAL PAINTS AND COATINGS AND MAY BE PRESENT IN THE RESIDUAL FILM. COMPONENT 2 PROBABLY CONTAINS OTHER UNIDENTIFIED ORGANIC AND INORGANIC COMPOUNDS.

THE IDENTITY OF COMPONENT 1 AND THE APPROPRIATE HEALTH AND SAFETY INFORMATION ARE UNKNOWN SINCE THE ITEM IS AN ARTICLE AND THE INFORMATION WAS NOT SUPPLIED BY THE MANUFACTURER.

SECTION II-B		ACUTE TOXICITY DATA	
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		

SECTION III		HEALTH INFORMATION
THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).		

EYE CONTACT
VAPORS, FUMES OR DUST FROM COMPONENT 2 MAY BE IRRITATING TO THE EYES.

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SKIN CONTACT

VAPORS, FUMES OR DUST FROM COMPONENT 2 MAY BE IRRITATING TO THE SKIN.

INHALATION

VAPORS, FUMES OR DUST FROM COMPONENT 2 MAY BE IRRITATING TO THE UPPER RESPIRATORY TRACT. INHALATION OF DUST CONTAINING SILICON DIOXIDE MAY CAUSE SILICOSIS. INHALATION OF DUST CONTAINING ASBESTOS FIBER MAY CAUSE ASBESTOSIS AND ASBESTOS AIRWAY DISEASE. (SEE OTHER HEALTH EFFECTS).

INGESTION

DUE TO THE PHYSICAL STATE OF THIS MATERIAL, INGESTION IS NOT A PROBABLE ROUTE OF EXPOSURE.

SIGNS AND SYMPTOMS

IRRITATION AS NOTED ABOVE. LUNG DAMAGE (SCARRING, BRONCHITIS, EMPHYSEMA) MAY BE EVIDENCED BY SHORTNESS OF BREATH, ESPECIALLY ON EXERTION, AND MAY BE ACCOMPANIED BY CHRONIC COUGH.

AGGRAVATED MEDICAL CONDITIONS

PREEXISTING EYE, SKIN, AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL. IMPAIRED RESPIRATORY FUNCTION(S) FROM PREEXISTING DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.

OTHER HEALTH EFFECTS

IN REFERENCE TO COMPONENT 2D, THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER HAS DETERMINED THERE IS SUFFICIENT EVIDENCE FOR THE CARCINOGENICITY OF CRYSTALLINE SILICON DIOXIDE IN EXPERIMENTAL ANIMALS AND LIMITED EVIDENCE FOR THE CARCINOGENICITY OF CRYSTALLINE SILICON DIOXIDE IN HUMANS. IN REFERENCE TO COMPONENT 2E, EXPOSURE TO VAPORS, FUMES, OR DUST MAY RESULT IN ABSORPTION OF LEAD INTO THE BLOODSTREAM, WHICH POTENTIALLY COULD RESULT IN LEAD TOXICITY OR ADVERSE REPRODUCTIVE EFFECTS. SUFFICIENT LEAD ABSORPTION IS KNOWN TO CAUSE DAMAGE TO BONE MARROW (ANEMIA), NERVOUS SYSTEM (BRAIN AND PERIPHERAL NERVE), KIDNEY AND TOXICITY OF BOWEL (COLIC). IN REFERENCE TO COMPONENT 2F, THE NATIONAL TOXICOLOGY PROGRAM AND THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER HAVE DETERMINED THERE IS SUFFICIENT EVIDENCE FOR THE CARCINOGENICITY OF CHROMIUM AND CERTAIN CHROMIUM COMPOUNDS BOTH IN HUMANS AND EXPERIMENTAL ANIMALS. IN REFERENCE TO COMPONENT 2G, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, THE NATIONAL TOXICOLOGY PROGRAM AND THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER HAVE DETERMINED THERE IS SUFFICIENT EVIDENCE FOR THE CARCINOGENICITY OF ASBESTOS IN BOTH HUMANS AND EXPERIMENTAL ANIMALS. THEREFORE, THE HANDLING PROCEDURES AND SAFETY PRECAUTIONS IN THIS MSDS SHOULD BE FOLLOWED TO MINIMIZE EMPLOYEE'S EXPOSURE.

SEE SECTION VI FOR ADDITIONAL HEALTH INFORMATION.

SECTION IV**OCCUPATIONAL EXPOSURE LIMITS**

NO.	OSHA		ACGIH		OTHER
	PEL/TWA	PEL/CEILING	TLV/TWA	TLV/STEL	
2A	10 MG/M3*		5 MG/M3*2,B2		
2B	10 MG/M3TD 5 MG/M3RF		10 MG/M3TD		
2C	15 MG/M3TD 5 MG/M3RF		10 MG/M3TD		
2D	0.05 MG/M3		0.05 MG/M3 *3		
2E	0.050 MG/M3		0.15 MG/M3 *4		
2F		0.1 PPM *5	0.05 MG/M3 *6		
2G	0.2 F/CC	1F/CC #7	2F/CC, A1		

*DUST AND FUME, AS FE. *2-FUME, AS FE *3-CRYSTALLINE SILICA, CRISTOBALITE-RESPIRABLE DUST.

*4-INORGANIC FUMES & DUSTS, AS LEAD. *5-CHROMIC ACID & CHROMATES(AS CR03). *6-CHROMIUM(VI), WATER SOLUBLE AND CERTAIN INSOLUBLE CMPDS, (A1) AS CR. *7-30 MIN EXCURSION LIMIT.

SECTION V**EMERGENCY AND FIRST AID PROCEDURES****EYE CONTACT**

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

SKIN CONTACT

IMMEDIATELY REMOVE CONTAMINATED CLOTHING OR SHOES, WIPE EXCESS FROM SKIN AND FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. USE SOAP IF AVAILABLE OR FOLLOW BY WASHING WITH SOAP AND WATER. DO NOT REUSE CLOTHING UNTIL THOROUGHLY CLEANED. GET MEDICAL ATTENTION.

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INHALATION

REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION.

INGESTION

DO NOT INDUCE VOMITING. IN GENERAL, NO TREATMENT IS NECESSARY UNLESS LARGE QUANTITIES OF MATERIAL ARE INGESTED. HOWEVER, GET MEDICAL ADVICE.

SECTION VI

SUPPLEMENTAL HEALTH INFORMATION

IN REFERENCE TO COMPONENT 2F, SEVERAL EPIDEMIOLOGIC STUDIES OF CHROMATE PRODUCTION WORKERS HAVE DEMONSTRATED AN ASSOCIATION OF EXPOSURE TO CHROMIUM COMPOUNDS WITH RESPIRATORY CANCER. WHETHER THE ASSOCIATION IMPLICATES HEXAVALENT CHROMIUM (CRVI) ALONE, OR TRIVALENT (CRIII) AS WELL, IS NOT DEFINITELY ADDRESSED BY THESE STUDIES.

SEVERAL HEXAVALENT CHROMIUM COMPOUNDS HAVE BEEN SHOWN TO BE CARCINOGENIC IN EARLIER BIOASSAY STUDIES. ONLY CALCIUM CHROMATE HAS CONSISTENTLY PRODUCED LUNG TUMORS IN RATS, BY SEVERAL ROUTES OF ADMINISTRATION. OTHER CHROMIUM COMPOUNDS -- STRONTIUM CHROMATE, ZINC CHROMATE, SODIUM DICHROMATE, LEAD CHROMATE, LEAD CHROMATE OXIDE, AND SINTERED CHROMIUM TRIOXIDE -- HAVE PRODUCED LOCAL SARCOMAS OR LUNG TUMORS IN RATS AT THE SITE OF INTRABRONCHIAL, INTRATRACHEAL, INTERMUSCULAR, SUBCUTANEOUS AND INTRAPERITONEAL APPLICATION.

HEXAVALENT CHROMIUM COMPOUNDS HAVE NOT INDUCED LUNG TUMORS BY INHALATION.

TRIVALENT CHROMIUM COMPOUNDS HAVE NOT BEEN REPORTED TO BE CARCINOGENIC BY ANY ROUTE OF ADMINISTRATION.

IN REFERENCE TO COMPONENT 2G, THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER HAS CONCLUDED THE FOLLOWING: "CIGARETTE SMOKING AND OCCUPATIONAL EXPOSURE TO ASBESTOS FIBRES INCREASES LUNG CANCER INCIDENCE INDEPENDENTLY; WHEN THEY OCCUR TOGETHER, THEY ACT MULTIPLICATIVELY." THE HANDLING PROCEDURES AND SAFETY PRECAUTIONS IN THIS MSDS SHOULD BE FOLLOWED TO MINIMIZE EMPLOYEE EXPOSURE.

SECTION VII

PHYSICAL DATA

BOILING POINT: N/A (DEG F)	SPECIFIC GRAVITY: N/A (H2O=1)	VAPOR PRESSURE: N/A (MM HG)
MELTING POINT: N/A (DEG F)	SOLUBILITY: INSOLUBLE (IN WATER)	VAPOR DENSITY: N/A (AIR=1)
EVAPORATION RATE (N-BUTYL ACETATE = 1): N/A		N/A=AVAILABLE

APPEARANCE AND ODOR:
SOLID

SECTION VIII

FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD:
>200 DEG. F

FLAMMABLE LIMITS % VOLUME IN AIR
LOWER: N/A UPPER: N/A

EXTINGUISHING MEDIA

USE WATER FOG, FOAM, DRY CHEMICAL OR CO2.

LAM 026441

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS

MATERIAL WILL NOT BURN UNLESS PREHEATED. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

SECTION IX REACTIVITY

STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID:
NONE KNOWN

HAZARDOUS DECOMPOSITION PRODUCTS
CARBON MONOXIDE AND UNIDENTIFIED ORGANIC AND INORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

SECTION X EMPLOYEE PROTECTION

RESPIRATORY PROTECTION
AVOID BREATHING DUST, VAPOR AND FUMES. IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SEC. IV) USE A NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER A FULL-FACE, ATMOSPHERE-SUPPLYING RESPIRATOR OR AIR-PURIFYING HIGH EFFICIENCY RESPIRATOR FOR PARTICULATES.

OSHA HAS ESTABLISHED TRANSITIONAL OCCUPATIONAL EXPOSURE LIMITS FOR THIS PRODUCT AND/OR COMPONENTS OF THIS PRODUCT. REFER TO 29 CFR 1910.1000 FOR THESE TRANSITIONAL LIMITS AND REQUIREMENTS FOR MEETING THESE LIMITS.

PROTECTIVE CLOTHING
AVOID CONTACT OF DUST, VAPORS AND FUMES WITH EYES. WEAR CHEMICAL GOGGLES IF THERE IS LIKELIHOOD OF CONTACT WITH EYES. AVOID CONTACT OF DUST, VAPOR AND FUMES WITH SKIN AND CLOTHING. WEAR GLOVES AND PROTECTIVE CLOTHING.

ADDITIONAL PROTECTIVE MEASURES
USE EXPLOSION-PROOF VENTILATION AS REQUIRED TO CONTROL PARTICULATE CONCENTRATIONS.

SECTION XI ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES
MAY BURN, ALTHOUGH NOT READILY IGNITABLE. USE CAUTIOUS JUDGEMENT WHEN CLEANING UP LARGE SPILLS. *** SHOVEL AND SWEEP UP OR USE INDUSTRIAL VACUUM CLEANER. AVOID GENERATING DUST CLOUDS. *** PUT INTO CONTAINERS FOR RECLAIMING OR DISPOSAL.

SECTION XII SPECIAL PRECAUTIONS

AVOID EXPOSURE TO FUMES, DUSTS AND VAPORS WHICH MAY BE GENERATED IF THIS MATERIAL IS CUT, WELDED, GRINDED, SANDED, ETC. FOLLOW NECESSARY PRECAUTIONS AS DESCRIBED IN THIS MSDS.

SECTION XIII TRANSPORTATION REQUIREMENTS

DEPARTMENT OF TRANSPORTATION CLASSIFICATION:
NOT HAZARDOUS BY D.O.T. REGULATIONS

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SECTION XIV OTHER REGULATORY CONTROLS

THE COMPONENTS OF THIS PRODUCT ARE LISTED ON THE EPA/TSCA INVENTORY OF CHEMICAL SUBSTANCES.

IN ACCORDANCE WITH SARA TITLE III, SECTION 313, THE EDS SHOULD ALWAYS BE COPIED AND SENT WITH THE MSDS.

SECTION XV

SPECIAL NOTES

SEE ENVIRONMENTAL SAFETY DATA SHEET FOR WASTE DISPOSAL AND OTHER ENVIRONMENTAL INFORMATION. THE OCCUPATIONAL EXPOSURE LIMITS (SECTION IV) AND/OR THE RESPIRATORY PROTECTION PRECAUTIONS (SECTION X) HAVE BEEN REVISED.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

DATE PREPARED: AUGUST 09, 1989

J. C. WILLETT

BE SAFE

READ OUR PRODUCT
SAFETY INFORMATION ...AND PASS IT ON
(PRODUCT LIABILITY LAW
REQUIRES IT)

SHELL OIL COMPANY
PRODUCT SAFETY AND COMPLIANCE
P. O. BOX 4320
HOUSTON, TX 77210

LAM 026443

ABS-044396



ENVIRONMENTAL DATA SHEET

EDS NUMBER ► 80,170 L PAGE 1

97449 (9-87)

PRODUCT ► PAINTED SCRAP METAL

PRODUCT
CODE ► MMMM

SECTION I		PRODUCT/COMPOSITION	
NO.	COMPONENT	CAS NUMBER	PERCENT
P	PAINTED SCRAP METAL	MIXTURE	100
1	METAL ALLOYS	MIXTURE	98->99
2	RESIDUAL PAINT/COATING WHICH MAY CONTAIN:	MIXTURE	<1-2
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SECTION II		SARA TITLE III INFORMATION			
NO.	EHS RQ (LBS) (*1)	EHS TPQ (LBS) (*2)	SEC 313 (*3)	313 CATEGORY (*4)	311/312 CATEGORIES (*5)

BASED UPON THE VARIABILITY OF THE COMPOSITION AND END USE OF THIS MATERIAL, SARA TITLE III INFORMATION MUST BE DETERMINED ON A CASE BY CASE BASIS.

FOOTNOTES

- *1 = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC.302
- *2 = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC 302
- *3 = TOXIC CHEMICAL, SEC 313
- *4 = CATEGORY AS REQUIRED BY SEC 313 (40 CFR 372.65 C), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
- *5 = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
 - HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
 - PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
 - P-5 = REACTIVE HAZARD

SECTION III ENVIRONMENTAL RELEASE INFORMATION

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SECTION IV

RCRA INFORMATION

IF THIS MATERIAL BECOMES A WASTE, IT WOULD NOT BE A HAZARDOUS WASTE BY RCRA CRITERIA (40 CFR 261).
PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN COMPLIANCE WITH LOCAL REGULATIONS.

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USE OF THE PRODUCT DESCRIBED HEREIN.

DATE PREPARED: MARCH 13, 1989

SHELL OIL COMPANY
ENVIRONMENTAL AFFAIRS
P. O. BOX 4320
HOUSTON, TX 77210

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE CALL
(713) 241-2252

FOR EMERGENCY ASSISTANCE PLEASE CALL
SHELL: (713) 473-9481
CHEMTREC: (800) 424-9300

LAM 026445

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