



# MATERIAL SAFETY DATA SHEET

MSDS NUMBER 857,242-4 R 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 +	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 SAFETY LAW  
REQUIREMENT)

SECTION I		NAME	
PRODUCT	CATERPILLAR 5P 960 GREASE		
CHEMICAL NAME	MIXTURE (SEE SECTION II-A)		
CHEMICAL FAMILY	PETROLEUM GREASE		
SHELL CODE	70346		

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	CATERPILLAR 5P 960 GREASE	MIXTURE	100
1	SEVERELY HYDROTREATED HEAVY NAPHTHENIC DIST.	64742-52-5	50-60
2	SOLVENT REFINED HYDROTREATED RESIDUAL OIL	64742-57-0	25-30
3	LITHIUM HYDROXYSTEARATE	7620-77-1	9
4	SULFURIZED LARD OIL	61790-49-6	6
5	NAPHTHENIC ACIDS, LEAD SALTS	61790-14-5	2.3
6	MOLYBDENUM DISULFIDE	1317-33-5	3

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**  
MAY BE MILDLY IRRITATING TO THE EYES.

**SKIN CONTACT**  
PROLONGED OR REPEATED CONTACT MAY CAUSE VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, FOLLICULITIS OR OIL ACNE AND MAY RESULT IN THE ABSORPTION OF LEAD (SEE SECTION VI). RELEASE DURING HIGH PRESSURE USAGE MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.

**INHALATION**  
NOT EXPECTED TO BE A RELEVANT ROUTE OF EXPOSURE, HOWEVER, UNDER HIGH TEMPERATURE CONDITIONS, VAPORS IRRITATING TO THE NOSE, THROAT AND UPPER RESPIRATORY TRACT MAY BE PRODUCED.

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**INGESTION**

BASED ON THE PRESENCE OF COMPONENT B, INGESTION MAY RESULT IN THE ABSORPTION OF LEAD (SEE SECTION VI).

**SIGNS AND SYMPTOMS**

IRRITATION AS NOTED ABOVE. LOCAL NECROSIS IS EVIDENCED BY DELAYED ONSET OF PAIN AND TISSUE DAMAGE A FEW HOURS FOLLOWING INJECTION.

**AGGRAVATED MEDICAL CONDITIONS**

PREEXISTING SKIN DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

**SECTION IV OCCUPATIONAL EXPOSURE LIMITS**

NO.	PEL/TWA	OSHA PEL/CEILING	TLV/TWA	ACGIH TLV/STEL	OTHER
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NO OSHA/PEL OR ACGIH/TLV HAS BEEN ESTABLISHED.

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

FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

**SKIN CONTACT**

REMOVE CONTAMINATED CLOTHING AND WIPE EXCESS OFF. WASH WITH SOAP AND WATER OR A WATERLESS HAND CLEANER FOLLOWED BY SOAP AND WATER. DO NOT REUSE CLOTHING UNTIL THOROUGHLY CLEANED. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. IF MATERIAL IS INJECTED UNDER THE SKIN, GET MEDICAL ATTENTION PROMPTLY TO PREVENT SERIOUS DAMAGE; DO NOT WAIT FOR SYMPTOMS TO DEVELOP.

**INHALATION**

REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION.

**INGESTION**

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

**NOTE TO PHYSICIAN**

\*NOTE TO THE PHYSICIAN: IN GENERAL, EMESIS INDUCTION IS UNNECESSARY IN HIGH VISCOSITY, LOW VOLATILITY PRODUCTS, I.E., MOST OILS AND GREASES.

**SECTION VI SUPPLEMENTAL HEALTH INFORMATION**

NO REPORTS OF LEAD TOXICITY HAVE BEEN ASSOCIATED WITH THIS PRODUCT. HOWEVER, SKIN CONTACT MAY RESULT IN ABSORPTION OF LEAD INTO THE BLOOD STREAM 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). HANDLING PROCEDURES AND SAFETY PRECAUTIONS SHOULD BE FOLLOWED TO MINIMIZE EMPLOYEE EXPOSURE.

## SECTION XII

## SPECIAL PRECAUTIONS

STORE IN A COOL, DRY PLACE WITH ADEQUATE VENTILATION. KEEP AWAY FROM OPEN FLAMES AND HIGH TEMPERATURES.

AVOID SKIN CONTACT. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE. PROPERLY DISPOSE OF CONTAMINATED LEATHER ARTICLES, INCLUDING SHOES, THAT CANNOT BE DECONTAMINATED.

## SECTION XIII

## TRANSPORTATION REQUIREMENTS

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

## SECTION XIV

## OTHER REGULATORY CONTROLS

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

## SECTION XV

## SPECIAL NOTES

SECTION XI - ENVIRONMENTAL PROTECTION HAS BEEN REVISED. THE INFORMATION IN THE "WASTE DISPOSAL" AND "ENVIRONMENT PROTECTION" HAS BEEN REMOVED AND INCLUDED IN THE ATTACHED ENVIRONMENTAL DATA SHEET. IN ACCORDANCE WITH SARA TITLE III, SECTION 313, THE EDS SHOULD ALWAYS BE COPIED AND SENT WITH THE MSDS. REVISIONS IN SECTIONS I, II-A, III, VII, VIII, IX, X AND XII.

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: JANUARY 26, 1989

## BE SAFE

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

J. C. WILLETT

SHELL OIL COMPANY  
PRODUCT SAFETY AND COMPLIANCE  
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## SECTION VII

## PHYSICAL DATA

BOILING POINT: NOT AVAILABLE  
(DEG F)SPECIFIC GRAVITY: NOT AVAILABLE  
(H2O=1)VAPOR PRESSURE: NOT AVAILABLE  
(MM HG)MELTING POINT: 349 (DROPPING  
(DEG F) POINT)SOLUBILITY: NEGLIGIBLE  
(IN WATER)VAPOR DENSITY: NOT AVAILABLE  
(AIR=1)

EVAPORATION RATE (N-BUTYL ACETATE = 1): NOT AVAILABLE

APPEARANCE AND ODOR:  
GRAY-BLACK, SMOOTH, SLIGHT ODOR.

## SECTION VIII

## FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD:  
221 DEG C. PMCC (BASE OIL)FLAMMABLE LIMITS /% VOLUME IN AIR  
LOWER: N/AV UPPER: N/AV

## EXTINGUISHING MEDIA

USE WATER FOG, DRY CHEMICAL OR CO2. DO NOT USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER.

## SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS

DO NOT ENTER CONFINED FIRE SPACE WITHOUT PROPER PROTECTIVE EQUIPMENT INCLUDING A NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS SURROUNDING EQUIPMENT AND STRUCTURES WITH WATER.

## UNUSUAL FIRE AND EXPLOSION HAZARDS

SULFUR OXIDES AND HYDROGEN SULFIDE, BOTH OF WHICH ARE TOXIC, MAY BE RELEASED UPON COMBUSTION.

## SECTION IX

## REACTIVITY

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

## CONDITIONS AND MATERIALS TO AVOID:

AVOID HEAT, OPEN FLAME AND CONTACT WITH STRONG OXIDIZING AGENTS.

## HAZARDOUS DECOMPOSITION PRODUCTS

THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDENT ON THE COMBUSTION CONDITIONS. A COMPLEX MIXTURE OF AIRBORNE SOLID, LIQUID PARTICULATES AND GASES WILL EVOLVE WHEN THIS MATERIAL UNDERGOES PYROLYSIS OR COMBUSTION. CARBON MONOXIDE, SULFUR OXIDES, LEAD OXIDES AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED UPON COMBUSTION.

## SECTION X

## EMPLOYEE PROTECTION

## RESPIRATORY PROTECTION

NOT ORDINARILY REQUIRED.

## PROTECTIVE CLOTHING

USE OIL RESISTANT GLOVES AND OTHER CLOTHING AS NEEDED TO AVOID SKIN CONTACT. AVOID CONTACT WITH EYES. WEAR SAFETY GLASSES OR GOGGLES AS APPROPRIATE.

## SECTION XI

## ENVIRONMENTAL PROTECTION

## SPILL OR LEAK PROCEDURES

SCOOP UP EXCESS GREASE. CLEAN AREA WITH APPROPRIATE CLEANER.