PED 60-60 VT LV POLYESTER RESNPRE-C

Version 1 Revision Date 07/06/2007 Print Date 07/06/2007

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	PED 60-60 VT LV POLYESTER RESNPRE-C
Product Use Description	:	ELECTRICAL INSULATION
Company	:	ELANTAS PDG, INC. 5200 North 2nd Street St. Louis MO 63147
Prepared by	:	Todd Thomas, Manager Regulatory Affairs
Telephone	:	(314) 621-5700
Visit our web site	:	www.elantas.com
E-mail address	:	Todd.Thomas@altana.com
Emergency telephone	:	INFOTRAC - 1-800-535-5053

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Form : liquid

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR1910.1200)

Potential Health Effects

Eyes	:	May cause mild eye irritation. Direct contact with the product or exposure to vapors or mist may cause stinging, tearing and redness.
Skin	:	May be slight to moderately irritating if exposed to skin. Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering.
Ingestion	:	May cause gastrointestinal irritation.
Inhalation	:	High concentrations of vapors may be irritating to the respiratory tract. May affect the brain or nervous system, causing dizziness, headache, or nausea.
Chronic Exposure	:	Repeated excessive exposure to this product may cause central nervous system, liver, or kidney effects and respiratory or eye irritation.
Aggravated Medical Condition	:	Respiratory disorders Skin disorders Kidney disorders Liver disorders

Primary Routes of Entry : Inhalation
Skin contact

Carcinogenicity:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Environmental Effects

Environmental Effects : No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
POLYESTER SOLUTION

Hazardous components

Component	CAS-No.	Weight %
Vinyl toluene	25013-15-4	30.00 - 60.00

SECTION 4. FIRST AID MEASURES

First aid procedures

Inhalation : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Consult a physician.

Skin contact : In case of contact, immediately flush skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash and thoroughly clean contaminated clothing

and shoes before reuse. Consult a physician.

Eye contact	:	In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Consult a physician.
Ingestion	:	If swallowed, consult a physician. This material (or its components) may present an aspiration hazard. Never give anything by mouth to an unconscious person.

Notes to physician

Risks	:	No information available.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point	:	52 °C (127.00 °F)
Suitable extinguishing media	:	Carbon dioxide (CO2) Foam Dry powder Water mist Water spray
Unsuitable extinguishing media	:	Do NOT use water jet.
Special protective equipment for fire-fighters	:	Wear a positive-pressure supplied-air respirator with full facepiece. Use personal protective equipment.
Specific hazards during fire fighting	:	Do not use a solid water stream as it may scatter and spread fire. Cool containers / tanks with water spray. Flash back possible over considerable distance. The pressure in sealed containers can increase under the influence of heat. Cool closed containers exposed to fire with water spray.
Hazardous decomposition products due to incomplete combustion.	:	Carbon oxides
Further information	:	Remove ignition sources Immediately evacuate personnel to safe areas. Use a water spray to cool fully closed containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Remove all sources of ignition. Ensure adequate ventilation. Avoid breathing vapors.
Environmental precautions	:	Clean contaminated floors and objects thoroughly while observing environmental regulations.
Methods for containment	:	Stop leak. Dike and contain spill.
Methods for cleaning up	:	Absorb with inert absorbent material and dispose of in accordance with applicable regulations.
Additional advice	:	Shut off source of spill if it can be done safely. Use non-sparking tools.

SECTION 7. HANDLING AND STORAGE

Handling

Handling	:	Keep closure tight and container upright to prevent leakage. Store container out of sunlight and away from heat, sparks and flame. Store only in well-ventilated areas. Containers should be grounded when being emptied. Never use pressure to empty. Container is not a pressure vessel. Do not puncture, drag, or slide container. ATTENTION: Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks and flames. Do not cut, puncture or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed. Avoid contact with or breathing of vapors during curing process. Do not get in eyes. Prevent repeated or prolonged breathing of vapor or spray mist.

Storage

Advice on common storage	:	Do not store above 25°C (77 °F). To minimize the possibility of polymerization and to maintain product quality, the ideal storage temperature is less than 25 °C. Above 25 °C, this material must be monitored closely.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Vinyl toluene	25013-15-4	TWA	50 ppm 242 mg/m3	1996-05-18	ACGIH
		STEL	100 ppm 483 mg/m3	1996-05-18	ACGIH
		TWA	100 ppm 480 mg/m3	1989-03-01	OSHA Z-1-A
		TWA	100 ppm 480 mg/m3	1993-06-30	OSHA Z-1

Engineering measures

Engineering measures : Use with adequate ventilation.
Provide general dilution or local exhaust ventilation in volume and pattern to keep the air contaminant concentration below the applicable exposure limit (OSHA PEL) of the combined components listed in Section III and below the LEL listed in this section.
All application areas should be ventilated in accordance with applicable OSHA regulations. (29 CFR 1910.94)

Personal protective equipment

Eye protection : Use safety eyewear designed to protect against splash of liquids.
Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection : Impervious gloves

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : Wear an appropriate, properly-fitted respirator (NIOSH/MSHA

approved) during and after application unless air monitoring demonstrates that vapor/mist levels are below applicable limits. Follow respirator manufacturer's directions for respirator use.

Hygiene measures	:	Wash thoroughly after handling. Do not get in eyes. Do not get on skin. Avoid prolonged or repeated breathing of vapor.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	liquid
Odor Threshold	:	no data available
Flash point	:	52 °C (127.00 °F) Method:
Ignition temperature	:	no data available
Lower explosion limit	:	no data available
Upper explosion limit	:	no data available
pH	:	no data available
Freezing Point	:	no data available
Boiling Point	:	no data available
Vapour pressure	:	no data available
Evaporation rate	:	no data available
Density	:	1.0689 g/cm3 at 25 °C (77 °F) (1,013 hPa)
Bulk density	:	1,068.8517 kg/m3
Partition coefficient: n-octanol/water	:	no data available
Relative vapour density	:	no data available

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	:	Keep away from open flames, hot surfaces and sources of ignition.
Materials to avoid	:	Strong oxidizing agents Acids
Hazardous decomposition products	:	Carbon dioxide, carbon monoxide and toxic vapors.
Chemical stability	:	Stable

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Product)	:	not applicable
Acute dermal toxicity (Product)	:	not applicable
Acute inhalation toxicity (Product)	:	not applicable
Skin irritation (Product)	:	not applicable
Eye irritation (Product)	:	not applicable
Sensitisation (Product)	:	not applicable

SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information (Product)	:	not applicable

SECTION 13. DISPOSAL CONSIDERATIONS

Further information	:	Dispose of in accordance with applicable Federal, State, and local regulations. Under the Resource Conservation and Recovery Act (RCRA) regulations, it is the responsibility of the product user to determine, at the time of disposal, whether a material should be classified as a hazardous waste. Consult your attorney or appropriate regulatory affairs officer for information on proper disposal.

SECTION 14. TRANSPORT INFORMATION

DOT	UN Number	:	1866
	Proper shipping name	:	RESIN SOLUTION
	Class	:	3
	Packing group	:	III
IATA	UN Number	:	1866
	Description of the goods	:	RESIN SOLUTION
	Class	:	3
	Packing group	:	III
	ICAO-Labels	:	3
	Packing instruction (cargo aircraft)	:	310
	Packing instruction (passenger aircraft)	:	309
	Package Instruction (Limited	:	Y309

quantity)

IMDG	UN Number	:	UN 1866
	Description of the goods	:	RESIN SOLUTION
	Class	:	3
	Packing group	:	III
	IMDG-Labels	:	3
	EmSNumber1	:	F-E
	EmSNumber2	:	S-E
	Marine pollutant	:	no

SECTION 15. REGULATORY INFORMATION

HMIS Classification : Health Hazard: 2
Chronic Health Hazard: *
Flammability: 2
Reactivity: 1
PPI:Safety Glasses, Gloves, Apron

National Fire Protection Association (NFPA) Class : II

Emergency Planning Community Right-To-Know (EPCRA)

SARA 302 Components : Not applicable

If listed below, this product contains toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Reactivity Hazard
Chronic Health Hazard

Reportable Quantity : 91,743 lbs

Toxic Substances Control Act (TSCA)
TSCA Status : We certify that all of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements (exempt)

Clean Air Act & Related Information

Non-volatile information is not a specification.

Hazardous Air Pollutants

If not listed above, this product does not contain HAPs at 1% or 0.1% or greater. Refer to Section 3 for HAP weight percentage.

Resource Conservation and Recovery Act

EPA Hazardous Waste Code(s)	:	D001	Ignitable

State Laws

Massachusetts Right To Know Components	:	Vinyl toluene	25013-15-4
Pennsylvania Right To Know Components	:	Unsaturated polyester resin	68171-28-8
		Vinyl toluene	25013-15-4
New Jersey Right To Know Components	:	Unsaturated polyester resin	68171-28-8
		Vinyl toluene	25013-15-4
New Jersey Trade Secret Registry Number for the product (NJ TSRN)	:	NOT APPLICABLE	
California Prop. 65 Components	:	This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.	

Canadian Environmental Protection Act

Domestic Substances List

WHMIS Classification :

SECTION 16. OTHER INFORMATION

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the

specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

M A T E R I A L S A F E T Y D A T A S H E E T

Product Code: MG1000G27-1
Product Name: HAPS FREE METALLIC GRAY LAC (GAL)

GEMINI INDUSTRIES, INC., 2300 HOLLOWAY DRIVE, EL RENO, OK 73036
24-Hour Emergency (Spill, Leak, Exposure or Accident): INFOTRAC 800-535-5053 Outside USA, Call Collect 1-352-323-3500
24-Hour Emergency HAZMAT Response and MSDS help: EMI 800-510-8510

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

(SEE TOP OF PAGE)

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT/EXPOSURE LIMITS	CAS#
SHORT SOYA CHAIN-STOPPED ALKYD	MIXTURE
AROMATIC SOLVENT TLV-TWA 100PPM	
1,2,4 TRIMETHYLBENZENE TLV-TWA25PPM PEL-TWA25PPM	
ACETIC ACID,BUYTLESTER TLV-TWA 150PPM PEL-TWA150PPM TKV-STEK200.0000 PPM15M	
TERT-BUTYL ACETATE TLV-TWA 200PPM PEL-TWA 200 PPN	
TERT BUTYL ACETATE	540-88-5
BUTYL ACETATE	123-86-4
ETHYL ACETATE	141-78-6
ETHYL ACETATE 400ppm TWA, OSHA & ACGIH '	
NITROCELLULOSE	MIXTURE 896
ISOPROPANOL: ACGIH 500ppm, STEL 1230 mg/m3 ACGIH TWA 400ppm, 983mg/m3	
500ppM STEL 1225 mg/m3 STEL, OSHA TWA 400ppm, 980 mg/m3	
ACETONE	67-64-1
OSHA VPEL 750 ppm TWA	
OSHA VPEL 1000 ppm STEL	
ACGIH TLV 500ppm TWA	
ACGIH TLV 750 ppm STEL	
ROSIN BASED RESIN 25	68038-41-5
BUTYL ACETATE	
DUPLICATING FLUID	MIX
ETHANOL: TWA OSHA 1000 ppm, TLV 1000ppm	
N-PROPYL ACETATE: TWA OSHA 200ppm, TLV ACGIH 200ppm	
ISOPROPANOL: 400 ppm, 400ppm	
ETHANOL	64-17-5
OSHA: 1000 PPM PEL-TWA	
NIOSH: 1000 PPM PEL-TWA	
ISOPROPANOL	67-63-0
400ppm TWA8 ACGIH, 983 mg/m3 TWA8 ACGIH	
980mg/m3 TWA8 OSHA, 500ppM STEL OSHA	
ISOBUTYL ACETATE	110-19-0
OSHA: PEL 150ppm-TWA	
ACGIH TLV 150ppm-TWA	
1,2,4-TRIMETHYLBENZENE	95-63-6
XYLENE	1330-20-7
OSHA: 100 PPM PEL-TWA	
NIOSH: 100 PPM PEL-TWA	

Product Code: MG1000G27-1
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TERTIARY BUTANOL	**75-65-0**
ETHYLBENZENE	**100-41-4**

3. HAZARDS IDENTIFICATION

Flammable in a liquid state
High vapor concentrations may cause mild eye and skin irritation.

POTENTIAL HEALTH EFFECTS

SKIN:

Widespread contact with skin for several hours can cause harmful amounts of material to be absorbed.

INGESTION:

Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even asphyxiation.

INHALATION:

High vapor concentrations or prolonged breathing of lower concentrations may result in damage to the liver, kidneys, lungs and blood forming organs.

4. FIRST AID MEASURES

EYES:

Flush with luke warm water for a minimum of 15 minutes. Seek medical attention immediately.

SKIN:

Remove contaminated clothing, wash area immediately with soap and water. See physician if irritation persists.

INGESTION:

Rinse mouth immediately. Drink 1 or 2 glasses of water to dilute. Do NOT induce vomiting. Contact physician or poison control center immediately.

INHALATION:

Remove exposed individual to fresh air and assist breathing if necessary. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASSIFICATION: CLASS 1B FLAMMABLE
LOWEST FLASH POINT: 0F
METHOD: TCC

DOT: FLAMMABLE LIQUID

FLAMMABLE LIMITS:

LOWER FLAMMABLE LIMIT: 0
UPPER FLAMMABLE LIMIT: 12.8
EXTINGUISHING MEDIA: Alcohol Foam, CO2, Dry Chemical.

The National Fire Protection Association Class B extinguisher is designed to extinguish NFPA Class 1B flammable liquid fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat. Do not apply to hot surfaces. Never use welding or cutting torch on or near container (even empty) because product (even residue) may ignite explosively. Liquid and vapor states of this substance are dangerous fire hazards and moderate explosion hazards when exposed to heat or flame.

FIREFIGHTING INSTRUCTIONS:

Clear fire area of unprotected personnel. Do not enter confined space without helmet, face shield, bunker coat, gloves, rubber boots and a positive pressure NIOSH-approved self-contained breathing apparatus. A water stream can scatter flames. A spray of water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

Stay upwind and away from spill or leak unless wearing appropriate protective equipment.
Stop and/or contain discharge if it may be done safely. Keep all sources of ignition away.
Ventilate area of spill. Use non-sparking tools for clean up. Cover with inert material to reduce fumes. Keep out of drains, sewer or waterways.
If large spill occurs, alert spill response teams. Contact fire authorities. Notify local health and pollution control agencies.

7. HANDLING AND STORAGE

HANDLING:

Bond and ground metal containers when transferring liquid. Avoid free fall of liquid in excess of a few inches. Personnel should avoid inhalation of vapors. Personal contact with the product should be avoided. Should contact be made, remove saturated clothing and flush affected skin areas with water. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid and/or solid), all hazard precautions given in this sheet must be observed.

STORAGE:

Keep product containers cool, dry and away from sources of ignition. Use and store this product with adequate ventilation. DO NOT SMOKE in or near storage areas

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

PRIMARY ROUTES OF ENTRY: inhalation, skin contact, eyes, ingestion.

Use local exhaust as required to control vapor concentrations. Avoid prolonged or repeated breathing of vapors. If exposure exceeds TLV, use NIOSH-approved respirator to prevent overexposure.

SKIN PROTECTION:

Required for prolonged or repeated contact. Wear resistant gloves such as natural rubber, neoprene, buna N or nitrile. An apron should be worn to avoid skin contact.

EYE PROTECTION:

Wear splashproof goggles and face shield if there is a likelihood of contact with eyes.

HYGIENIC PRACTICES:

Wash hands thoroughly before eating or using restroom. Remove contaminated clothing immediately and do not wear again until it has been properly laundered.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 133F
MELTING POINT: N/A
VAPOR PRESSURE: N/A
VAPOR DENSITY: Heavier Than Air
SOLUBILITY IN WATER: N/A
SPECIFIC GRAVITY: .954
COATING VOC LB/GL: 5.1149 lb/gl
COATING VOC GM/LTR: 613 g/l
MATERIAL VOC LB/GL: 3.6393 lb/gl
MATERIAL VOC GM/LTR: 436 g/l
% VOLATILE BY VOLUME: 79.034%
EVAPORATION RATE: Faster than Butyl Acetate.
WEIGHT PER GALLON: 7.943 lb/gl
PH: N/A
ODOR: N/A
APPEARANCE: Colored Liquid

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:
Stable Conditions To Avoid: high heat, sparks, flames.

INCOMPATIBILITY
Materials to Avoid: Strong oxidizing agents, strong alkalines, strong mineral acids

HAZARDOUS DECOMPOSITION PRODUCTS:
Oxidation may produce carbon and nitrogen oxides.

HAZARDOUS POLYMERIZATION:
Will not occur.

11. TOXICOLOGICAL INFORMATION

CANCER INFORMATION:
This product contains no reported carcinogens or suspected carcinogens.

TERATOLOGY (BIRTH DEFECT) INFORMATION:
This product contains no reported or suspected teratogens.

REPRODUCTION INFORMATION:
This product contains a chemical known to the State of California to cause cancer.

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:
Uncontrolled release of the product may result in contamination of air, ground, waterways and/or sewers.

13. DISPOSAL CONSIDERATIONS

Do not flush to sewer, watershed or waterway. Dispose of product in accordance with applicable local, county, state and federal regulations.

14. TRANSPORT INFORMATION

DOT NUMBER: UN1263

15. REGULATORY INFORMATION

HMIS HAZARD INDEX: 4=SEVERE, 3=SERIOUS, 2=MODERATE, 1=SLIGHT, 0=LEAST
HEALTH: 2
FLAMMABILITY: 3
REACTIVITY: 0
PERSONAL PROTECTION: I
SECTION 313:
This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372 (Chemicals

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listed below constitute the specific percentage of product by weight. Chemicals that do not have a listed percentage comprise less than 1% of total product weight):

		% BY WT
* 1,2,4-TRIMETHYLBENZENE	95-63-6	
* XYLENE	1330-20-7	
* TERTIARY BUTANOL	75-65-0	

16. DISCLAIMER:

The following supercedes any provision contained in the forms, letters and papers of your company. This product is designed and intended for professional application only. All products should be thoroughly tested under application conditions prior to use. The information contained herin is believed to be reliable. HOWEVER, GEMINI MAKES NO WARRANTY CONCERNING THIS PRODUCT, WHETHER EXPRESS OR IMPLIED. INCLUDING THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

UNDER NO CIRCUMSTANCES SHALL GEMINI BE LIABLE FOR SPECIAL, INCIDENTAL,CONSEQUENTIAL,OR ANY OTHER DAMAGES FROM ALLEGED NEGLIGENCE, BREACH OF WARRENTY, STRICT LIABILITY, OR ANY OTHER LEGAL THEORY, ARISING OUT OF THE USE OR HANDLING OF THIS PRODUCT. THE SOLE REMEDY OF THE BUYER AND THE SOLE LIABILITY OF GEMINI FOR ANY CLAIMS SHALL BE LIMITED TO THE BUYER'S PURCHASE PRICE OF THE PRODUCT WHICH IS THE SUBJECT OF THE CLAIM OR THE AMOUNT ACTUALLY PAID FOR SUCH PRODUCT, WHICHEVER IS LESS.

TECHNICAL ADVICE FURNISHED BY GEMINI SHALL NOT CONSTITUTE AN EXPRESS WARRANTY, WHICH IS EXPRESSLY DISCLAIMED. ALL TECHNICAL ADVICE GIVEN IS ACCEPTED AT THE RISK OF THE BUYER.

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: **POLYREX EM**
Product Description: Base Oil and Additives
Product Code: 640359-00, 97Q287
Intended Use: Grease

COMPANY IDENTIFICATION

Supplier: **EXXON MOBIL CORPORATION**
3225 GALLOWS RD.
FAIRFAX, VA. 22037 USA

24 Hour Health Emergency	609-737-4411
Transportation Emergency Phone	800-424-9300
ExxonMobil Transportation No.	281-834-3296
Product Technical Information	800-662-4525, 800-947-9147
MSDS Internet Address	http://www.exxon.com, http://www.mobil.com

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

Reportable Hazardous Substance(s) or Complex Substance(s)

Name	CAS#	Concentration*
AMINES, C12-14-ALKYL, ISOOCTYL PHOSPHATES	68187-67-7	1 - 5%

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

SECTION 3 HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).

POTENTIAL HEALTH EFFECTS

Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure injection under skin may cause serious damage.

NFPA Hazard ID:	Health:	0	Flammability:	1	Reactivity:	0
HMIS Hazard ID:	Health:	0	Flammability:	1	Reactivity:	0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary

from person to person.

SECTION 4 FIRST AID MEASURES

INHALATION

Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Smoke, Fume, Aldehydes, Sulfur oxides, Incomplete combustion products, Oxides of carbon

FLAMMABILITY PROPERTIES

Flash Point [Method]: >204C (399F) [EST. FOR OIL, ASTM D-92 (COC)]
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: N/D

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable

regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders. For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

SPILL MANAGEMENT

Land Spill: Scrape up spilled material with shovels into a suitable container for recycle or disposal.

Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Skim from surface.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7 HANDLING AND STORAGE

HANDLING

Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard.

Static Accumulator: This material is not a static accumulator.

STORAGE

Do not store in open or unlabelled containers.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No protection is ordinarily required under normal conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

Chemical/oil resistant clothing is recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

See Sections 6, 7, 12, 13.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

GENERAL INFORMATION

Physical State: Solid
Form: Semi-fluid
Color: Blue
Odor: Characteristic
Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 C): 0.884
Flash Point [Method]: >204C (399F) [EST. FOR OIL, ASTM D-92 (COC)]
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: N/D
Boiling Point / Range: > 330C (626F) [Estimated]
Vapor Density (Air = 1): N/D
Vapor Pressure: < 0.013 kPa (0.1 mm Hg) at 20 C [Estimated]
Evaporation Rate (n-butyl acetate = 1): N/D
pH: N/A
Log Pow (n-Octanol/Water Partition Coefficient): > 3.5 [Estimated]
Solubility in Water: Negligible
Viscosity: 95 cSt (95 mm2/sec) at 40 C
Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: >250°C (482°F)
DMSO Extract (mineral oil only), IP-346: < 3 %wt
Decomposition Temperature: N/D

NOTE: Most physical properties above are for the oil component in the material.

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Excessive heat. High energy sources of ignition.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Route of Exposure	Conclusion / Remarks
Inhalation	
Toxicity: No end point data.	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data.	Negligible hazard at ambient/normal handling temperatures. Based on assessment of the components.
Ingestion	
Toxicity (Rat): LD50 > 5000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.
Skin	
Toxicity (Rabbit): LD50 > 5000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.
Irritation (Rabbit): Data available.	Mildly irritating to skin with prolonged exposure. Based on assessment of the components.
Eye	
Irritation (Rabbit): Data available.	May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.

CHRONIC/OTHER EFFECTS

Contains:

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

Additional information is available by request.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC	3 = IARC 1	5 = IARC 2B
2 = NTP SUS	4 = IARC 2A	6 = OSHA CARC

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

MOBILITY

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Base oil component -- Expected to be inherently biodegradable

BIOACCUMULATION POTENTIAL

Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrositivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14 TRANSPORT INFORMATION

LAND (DOT): Not Regulated for Land Transport

LAND (TDG): Not Regulated for Land Transport

SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA): Not Regulated for Air Transport

SECTION 15 REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

Complies with the following national/regional chemical inventory requirements:: KECI, AICS, IECSC, TSCA

Special Cases:

Inventory	Status
ELINCS	Restrictions Apply
NDSL	Restrictions Apply

EPCRA: This material contains no extremely hazardous substances.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

SARA (313) TOXIC RELEASE INVENTORY: This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
DIPHENYLAMINE	122-39-4	5, 18

--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

SECTION 16 OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Changes:
Section 10 Stability and Reactivity - Header was modified.
Section 13: Disposal Recommendations - Note was modified.
Section 09: Boiling Point C(F) was modified.
Section 09: n-Octanol/Water Partition Coefficient was modified.
Section 08: Personal Protection was modified.
Section 09: Vapor Pressure was modified.
Section 07: Handling and Storage - Handling was modified.

Section 05: Hazardous Combustion Products was modified.
Section 06: Accidental Release - Spill Management - Water was modified.
Section 09: Relative Density - Header was modified.
Section 09: Flash Point C(F) was modified.
Section 09: Viscosity was modified.
Section 08: Hand Protection was modified.
Section 14: Sea (IMDG) - Header was modified.
Section 14: Air (IATA) - Header was modified.
Section 14: LAND (TDG) - Header was modified.
Section 14: LAND (DOT) - Header was modified.
Section 15: List Citation Table - Header was modified.
Section 14: LAND (DOT) - Default was modified.
Section 14: LAND (TDG) Default was modified.
Section 14: Sea (IMDG) - Default was modified.
Section 14: Air (IATA) - Default was modified.
Section 15: National Chemical Inventory Listing - Header was modified.
Section 15: National Chemical Inventory Listing was modified.
Section 08: Exposure limits/standards was modified.
Section 15: OSHA Hazard Communication Standard was modified.
Section 15: Special Cases Table was modified.
Hazard Identification: OSHA - May be Hazardous Statement was modified.
Section 09: Oxidizing Properties was modified.
Section 06: Protective Measures was added.
Section 06: Accidental Release - Protective Measures - Header was added.
Section 09: Decomposition Temperature was added.
Section 09: Decomposition Temp - Header was added.

Internal Use Only
MHC: 0B, 0B, 0, 0, 2, 0 PPEC: A

DGN: 2026672XUS (1008419)