

Panama Petrochem Ltd.
Plot-No.3303, GIDC Estate,
Ankleshwar, Gujarat-393002.
INDIA.



TRANSFORMER OIL

Filename: MSDS TRANSFORMER OIL

Revision Date: 25.05.2014

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY IDENTIFICATION	EMERGENCY TELEPHONE NUMBERS
Panama Petrochem Ltd. Plot No. 3303, G.I.D.C. Estate, Ankleshwar – 393002.	Factory : (02646)250281 221068
4 th Floor, Aza House, Turner Road, Opp. Andhra Bank, Near Tava Restorent, Bandra (West) Mumbai - 400050	Office : (022) 42177777

2. COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINING :-

COMPONENTS	AMOUNT	LIMIT / QTY	TYPE
Chemical Name : HYDROCARBON MINERAL OILS.			
CAS-8012-95-1	100 %	5 mg/m ³ (mist)	TWA
		10 mg/m ³ (mist)	STEL
		5 mg/m ³ (mist)	PEL

COMPOSITION COMMENT :

All the components of this material are on the toxic substance Control Act, Chemical Substance Inventory.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

EYE :

Not expected to cause prolonged or significant eye irritation.

SKIN :

Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.

INGESTION :

Not expected to be harmful if swallowed.

INHALATION :

Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit.

4. FIRST AID MEASURES

EYE :

No specific first aid measures are required because this material is not expected to cause eye irritation. As a precaution remove contact lenses, if worn, and flush eyes with water.

SKIN :

No specific first aid measures are required because this material is not expected to be harmful if it contacts the skin. As a precaution, remove clothing and shoes if contaminated. Use a waterless hand cleaner, mineral oil, or petroleum jelly to remove the material. Then wash skin with soap and water. Wash or clean contaminated clothing and shoes before reuse.

INGESTION :

No specific first aid measures are required because this material is not expected to be harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an unconscious person.

INHALATION :

If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

5. FIRE FIGHTING MEASURES

FIRE CLASSIFICATION :Not classified.

FLAMMABLE PROPERTIES :-

FLASH POINT : 130 °C Min.

AUTOIGNITION : NDA

FLAMMABILITY LIMITS (% by volume in air) :Lower : NA , Upper : NA

EXTINGUISHING MEDIA : CO₂, Dry Chemical, Foam, Water Fog.

NFPA RATINGS : Health 0, Flammability 1, Reactivity 0.

FIRE FIGHTING INSTRUCTIONS :

This material will burn, although it is not easily ignited.

COMBUSTION PRODUCTS :

Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Exposure Controls/Personal Protection. Contain liquid to prevent further contamination of soil, surface water or ground water. Clean up small spills using appropriate techniques such as absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.

7. HANDLING AND STORAGE

Drum is not designed to contain pressure. Do not use pressure to empty drum or drum may rupture with explosive force. Empty containers retain product residue (solid, liquid and/or vapor) and can be dangerous. Do not pressurise, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, electricity, or other sources of ignition. They may explode and cause injury or death. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider, the potential hazards of this material (see section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS :

Store in a well-ventilated area. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended mineral oil mist exposure limits.

PERSONAL PROTECTIVE EQUIPMENT :-

No special protection is normally required.

EYE/FACE PROTECTION :

No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

SKIN PROTECTION:

No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted,

physical requirements and other substances. Suggested materials for protective gloves include : <viton> <Nitrile> <Silver Shield>

RESPIRATORY PROTECTION:

No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the recommended mineral oil mist exposure limits. If not wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air-purifying respirators : particulate.

9. PHYSICAL AND CHEMICAL PROPERTIES :			
SR. NO.	CHARACTERISTICS	SPECIFICATION	
		MIN.	MAX.
1	Appearance	The oil shall be clear and transparent and free from suspended matter of sediment	
2	Interfacial Tension N/m @25 C	0.4 minimum	
3	Density @ 20°C max. g/cm		0.895
4	Kinematic viscosity @ 40°C max.cst	-	16 max
	@ -15°C max.cst	-	800
5	Flash Point (PMCC) °c min.		-
6	Pour Point °c max.	140	-30
7	Neutralisation Value	-	
	(a) Total acidity max. mg KOH/gm		0.03
	(b) Inorganic Acidity/ Alkalinity	-	-
8	Corrosive Sulphur	Non corrosive	
9	Electric Strength (Breakdown voltage)		
	1.New Unfiltered Oil min.	40	-
	2. After filtration	60	-
10	Dielectric Dissipation Factor (Tan delta) @ 90°C max.	-	0.002
11	Oxidation Stability@ 100°C for 164 hrs		
	(a) Neutralisation Value after Oxidation max.	-	0.4
	(b) Total Sludge after Oxidation max.		0.1
12	Presence of Oxidation inhibitor	-	ND
13	Water Content max., ppm		40
14	Gassing Tendency at 50Hz after 120 min. nm ³ /mn, max.	-	5
		-	

10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:

No data available.

CHEMICAL STABILITY :Stable.

CONDITIONS TO AVOID :

No data available.

INCOMPATIBILITY WITH OTHER MATERIALS:

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

HAZARDOUS POLYMERIZATION :

Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS :

The mean 24-hour Draize eye irritation score in rabbits is 3.0-4.0/110.

SKIN EFFECTS:

For a 24-hour exposure, the Primary Irritation Score (PIS) in rabbits is: 0.1 – 0.2/8. The acute dermal 1050 in rabbits is > 5 g/kg. This material did not cause skin sensitization reactions in a Buehler guinea pig test.

ACUTE ORAL EFFECTS:

The acute oral LD50 in rats is > 5 G/kg.

ACUTE INHALATION EFFECTS:

The acute respiratory toxicity is based on data for a similar material.

GENETIC TOXICITY:

This product gave negative results in the following mutagenicity assays:
<Microbial/Microsome Reverse Mutation Assay (Ames Test)

ADDITIONAL TOXICOLOGY INFORMATION:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the Hazard Communication Standard. These oils have not been classified by the International Agency for Research on Cancer (IARC) as : carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

The 96-hour LC50 for rainbow trout is > 1000 mg/l.

ENVIRONMENTAL FATE:

This material is not expected to be readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

14. TRANSPORT INFORMATION

Non Toxic when transported in open tanker or in drums.

15. REGULATORY INFORMATION

SARA 311 CATEGORIES:

1. Immediate (Acute) Health Effects	:	NO
2. Delayed (Chronic) Health Effects	:	NO
3. Fire Hazard	:	NO
4. Sudden Release of Pressure Hazard	:	NO
5. Reactivity Hazard	:	NO

REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	22=TSCA Sect 5(a)(2)
02=MASS RTK	12=CERCLA 302.4	23=TSCA Sect 6
03=NTP Carcinogen	13=MN RTK	24=TSCA Sect 12(b)
04=CA Prop 65-Carcin	14=ACGIH TWA	25=TSCA Sect 8(a)
05=CA Prop 65-Repro Tox	15=ACGIH STEL	26=TSCA Sect 8(d)
06=IARC Group 1	16=ACGIH Calc TLV	27=TSCA Sect 4(a)
07=IARC Group 2A	17=OSHA PEL	28=Canadian WHMIS
08=IARC Group 2B	18=DOT Marine Pollutant	29=OSHA CEILING
09=SARA 302/304	19=Chevron TWA	30=Panama STEL
10=PA RTK	20=EPA Carcinogen	

The following components of this material are found on the regulatory lists indicated.

16. OTHER INFORMATION

NFPA RATINGS: Health 0; Flammability 1; Reactivity 0;
HMIS RATINGS: Health 1; Flammability 1; Reactivity 0;
 (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, - Chronic Effect Indicator), These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT:

This revision updates Section 1 (Chemical Product).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	TPQ - Threshold Planning Quantity
RQ - Reportable Quantity	PEL - Permissible Exposure Limit
C - Ceiling Limit	CAS-Chemical Abstract Service Number
A1-5 - Appendix A Categories	() - Change Has Been proposed
NDA - No Data Available	NA - Not Applicable

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.