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MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: SYNONYMS:	LPA-142 SOLVENT Paraffinic, Naphthenic Solvent, Aliphatic Solvent		
MANUFACTURER: ADDRESS:	SASOL North America Inc. 900 Threadneedle, Houston, TX 77079		
TELEPHONE NUMBERS:	CHEMTREC - Transportation Emergency (24-hr) Other Emergencies (24-hrs) MSDS and Product Information (8:00am-4:30pm CST) Health and Safety Information (8:00am-4:00pm CST)	(800) 424-9300 (337) 494-5142 (281) 588-3491 (337) 494-5403	
2. COMPOSITION / INFORMATION ON INGREDIENTS			

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<u>Components</u>	<u>CAS Number</u>	<u>Weight%</u>	
Paraffinic, Naphthenic Solvent	64742-47-8	100	

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

3. HAZARDS IDENTIFICATION

Emergency Overview

Water white, oily liquid. Hydrocarbon odor.

FIRE OR EXPLOSION: CAUTION! COMBUSTIBLE LIQUID AND VAPOR May by ignited by heat, spark, or flames. Vapors may travel to a source of ignition and flash back. Container may explode in heat of fire.

HEALTH HAZARD: MAY CAUSE SKIN IRRITATION High vapor concentrations may cause headaches, stupor, irritation of throat and eyes.

Potential Health Effects

EYES:

Liquid contact may cause slight irritation.

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SKIN:

Repeated or prolonged contact can cause redness, irritation, and scaling of the skin (dermatitis). Normal care and personal hygiene should prevent skin effects.

INHALATION:

High vapor concentrations may cause headaches, stupor, irritation of throat and eyes, and kidney effects. Aspiration into lungs may cause pnuemonia or death.

INGESTION:

Low order of toxicity. Causes irritation of the stomach and intestines, resulting in nausea and vomiting.

(See Section 11 for Toxicological Information)

4. FIRST AID MEASURES

EYES:

Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, seek medical attention.

SKIN:

Remove contaminated clothing. Wash skin with soap and plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse.

INHALATION:

Remove to fresh air. If not breathing, give artificial respiration and seek medical attention immediately. Oxygen should only be administered by trained personnel.

INGESTION:

If swallowed, call a physician immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammable Properties

FLASH POINT / METHOD: 148°F (64°C) / TCC

AUTOIGNITION TEMPERATURE: 451°F (233°C)

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FLAMMABLE LIMITS IN AIR % BY VOLUME: LOWER: 0.7 UPPER: 7.0

FIRE AND EXPLOSION HAZARD: None expected. NFPA Class IIIA combustible liquid.

EXTINGUISHING MEDIA:

Water spray (fog), foam, dry chemical, or carbon dioxide (CO₂).

FIRE FIGHTING INSTRUCTIONS:

Cool exposed equipment with water spray until well after fire is out. Self-contained breathing apparatus (SCBA) and structural firefighter's protective clothing will provide limited protection.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK:

Absorb spill with inert material, then place in a chemical waste container. For large spills, dike for later disposal. Avoid runoff to waterways and sewers. Dispose of according to local, state, and federal regulations.

CERCLA HAZARDOUS SUBSTANCE: <u>Component</u>

<u>CERCLA RQ</u> <u>Maximum Wt. %</u>

Contains no chemicals on the CERCLA Hazardous Substance List. Under EPA-CWA, this product is classified as an oil under Section 311. Spills into or leading to surface waters that cause a sheen must be reported to the national response center, 800-424-8802.

7. HANDLING AND STORAGE

ELECTROSTATIC ACCUMMULATION HAZARD:

When transferring this product, there is potential for the accumulation of static electricity. Consideration should be given to bonding and grounding of equipment during loading, unloading, and transfer of this product.

USUAL SHIPPING CONTAINERS:

Drums, and DOT approved tank cars and tank trucks.

STORAGE / TRANSPORT TEMPERATURE: Ambient.

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STORAGE / TRANSPORT PRESSURE: Ambient

LOAD / UNLOAD TEMPERATURE: Ambient.

STORAGE AND HANDLING MATERIALS: Carbon steel is suitable.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Air contaminant levels should be controlled below the PEL or TLV for this product (see Exposure Guidelines of this section). Mechanical ventilation may be necessary if working with this product in enclosed areas and at elevated temperatures.

Personal Protective Equipment

EYES:

When contact with liquid is possible, use a face shield and/or chemical splash goggles. Otherwise use safety glasses with side shields or goggles.

SKIN:

Chemical gloves should be worn to prevent repeated contact. If potential for significant exposure to liquid exists, use full protective clothing and chemical boots.

RESPIRATORY PROTECTION:

Respiratory protection is normally not required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Select the appropriate NIOSH-approved organic vapor air-purifying respirator, self-contained breathing apparatus, or air-supplied respirators in situations where there may be potential for overexposure.

Exposure Guidelines: Component	OSHA PEL	ACGIH TLV
None established.		
VISTA RECOMMENDED PEL: 100 ppm (525 mg/m ₃) for 8-hour TWA (Exposure limits for Petroleum Distillate - Stoddard Solvent).		
PEL = Permissible Exposure Limits TLV = Threshold Limit Value EL = Excursion Limit		TWA = Time Weighted Average (8 hr.) STEL = Short Term Exposure Limit (15 min.)

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Carcinogenicity_

No carcinogenic ingredients.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Water white, oily liquid.

ODOR: Hydrocarbon odor.

VAPOR PRESSURE (mm Hg.): 0.36 torr 20°C

VAPOR DENSITY (Air = 1): 5 - 6

SOLUBILITY IN WATER: 52 ppm 20°C VISCOSITY: 1.4 cSt @ 104°F/40°C

PHYSICAL STATE: Liquid.

BOILING POINT: 379 - 412 °F (193 - 211 °C)

MELTING POINT: <-94 °F (<-70 °C)

SPECIFIC GRAVITY (H₂O = 1): .802 @ 60°F/16°C

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: High temperatures.

INCOMPATABILITY WITH OTHER MATERIALS: May react with strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: None expected.

HAZARDOUS POLYMERIZATION: None.

11. TOXICOLOGICAL INFORMATION

This product has not been specifically tested. Data for similar products are provided below:

EYES:

Primary Eye Irritation Index (Rabbits): Maximum average score - 3.0 after one hour (Maximum score is 110.)

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SKIN:

Primary Skin Irritation Index (Rabbits): 1.2 (Maximum score is 8.0.) **Acute Dermal LD**₅₀ (**Rabbits):** 2.0 - 4.0 g/kg for LPA Solvent.

INHALATION:

No toxicity observed in rats exposed for four hours to 2 mg/l. Acute Inhalation LC_{50} : >4.3 mg/l.

INGESTION:

Acute Oral LD₅₀ (Rat): >5 g/kg.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

No toxicity was observed because of extremely low water solubility. If exposed to the aquatic environment, SASOL North America Inc. LPA solvents would adsorb to sediments and could cause toxic effects to organisms in the sediments. If solvents were spilled on soil, some potential toxic effects could occur before biodegadation could remove them. Soil data is not available.

CHEMICAL FATE INFORMATION:

Data demonstrates that LPA solvents biodegrade in water-based tests. The amount of biodegradation is small because of low water solubilities.

13. DISPOSAL CONSIDERATIONS

SPECIAL INSTRUCTIONS:

Dispose of in accordance with local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

WASTE CLASSIFICATION:

If discarded in its purchased form, this product is not a RCRA hazardous waste. Liquids with a flash point below 140 °F have the RCRA characteristic of ignitability, and are classed as hazardous for disposal purposes. This product should be evaluated at the time of disposal, since the product uses, transformations, and contamination that may occur during use may result in classification to a hazardous waste for reasons other than, and in addition to, ignitability.

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EMPTY CONTAINERS:

Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, 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. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

(See Section 6 for CERCLA Reporting Requirements)

14. TRANSPORT INFORMATION

DOT DESCRIPTION:

This product is regulated as a hazardous material according to the U.S. Department of Transportation (DOT)in bulk quantities (greater than 119 gallons per package) only. It is not regulated for transportation in non-bulk quantities.

PROPER SHIPPING NAME:Petroleum distillates, n.o.sHAZARD CLASS:Combustible liquidIDENTIFICATION NUMBER:UN 1268PACKING GROUP:III

ICAO / IATA DESCRIPTION:

This product is not a dangerous good as defined by IATA for air transportation.

IMO DESCRIPTION (IMDG CODE):

This product is not a dangerous good as defined by IMO in the IMDG Code for water transportation.

15. REGULATORY INFORMATION

U.S. Federal Regulations

OSHA HAZARD COMMUNICATION STANDARD CLASSIFICATION: Combustible liquid as defined by the OSHA Hazard Communication Standard.

TSCA INVENTORY LISTING: Component

CAS Number

Distillates (Petroleum), Hydrotreated Light

64742-47-8

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SARA 302 STATUS: Component

CAS Number Maximum Wt. %

Contains no chemicals subject to SARA 302 reporting.

SARA 311/312 CLASSIFICATION: SARA 311/312 "Fire hazard".

SARA 313 CHEMICALS: Component

CAS Number Maximum Wt. %

Contains no chemicals subject to SARA 313 reporting.

(See Section 6 for CERCLA Reporting Requirements.)

International Regulations

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) CLASSIFICATION: Class B, Division 3: Combustible liquid.

CANADIAN DOMESTIC SUBSTANCE LIST (DSL) INVENTORY LIST	ING:
Chemical Name	CAS Number
Distillates (Petroleum), Hydrotreated Light	64742-47-8
EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL Chemical Name	SUBSTANCES (EINECS) LISTING: EINECS Number
Distillates (Petroleum), Hydrotreated Light	2651498
JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTR Chemical Name	Y (MITI) INVENTORY LISTING: <u>Section Structure #</u>
Residual oil from hydrofining or cracking of petroleum	9-19
AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) LI Chemical Name	STING: <u>CAS Number</u>
Distillates (Petroleum), Hydrotreated Light	64742-47-8

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State Regulations

CALIFORNIA SAFE DRINKING WATER ACT (PROP 65) LISTING: Component

CAS Number

No ingredients listed in this section

Based on data currently available, this product contains no detectible quantities of Proposition 65 chemicals. This assessment is based on the analytical detection limit of 1 ppm for benzene by GC mass spec.

16. OTHER INFORMATION

Hazard Ratings	<u>NFPA</u>	<u>HMIS</u>
HEALTH: FLAMMABILITY: REACTIVITY:	1 2 0	1 2 0

Revision Summary

Revision: Company name change.

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