

09/12/11

## MATERIAL SAFETY DATA SHEET

QUAD-LUBE III

**SECTION 1 – IDENTIFICATION****Chemical Family:** Petroleum Hydrocarbon**Trade Name & Synonyms:** Quad-Lube III**Classification:** Penetrant**Suppliers Name:** Lonestar Maintenance Chemicals**Emergency Phone:** 1-800-721-2448**Address:** P.O. Box 209, Buna, TX 77612**SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name	CAS #	PEL	TLV
Hydrocarbon Stoddard Solvent	8052-41-3	500	100
Trimethyl Benzene, all isomers	25551-13-7	N/A	25
Ethyl Benzene	25550-14-5	N/A	100
Naphthalene	64742-88-7	10	10
Cumene	98-82-8	50	50
n- Propyl Benzene	103-65-1	N/A	N/A
Xylene, all isomers	1330-20-7	100	100
Non-Hazardous Proprietary Mixture	Mixture	N/A	N/A

**SECTION 3 – HAZARD IDENTIFICATION****Potential Health Effects:****Eye Contact:** slightly irritating but does not injure eye tissue. Symptoms include stinging, watering, redness, and swelling.**Skin Contact:** Frequent or prolonged contact may irritate and cause dermatitis. Low order of toxicity. May aggravate an existing dermatitis condition. The severity of irritation will depend on the amount of material that is applied to the skin and the speed and thoroughness that it is removed. Symptoms include redness, itching, and burning of the skin.**Inhalation:** High vapor concentrations (well above ambient) are irritating to the eyes and the respiratory tract, and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, or other central nervous system effects, including death. Breathing high concentrations of this material in an enclosed space or by intentional abuse, can cause irregular heartbeats which can cause death.**Ingestion:** If swallowed, this material may irritate the mucous membranes of the mouth, throat and esophagus. It can be readily absorbed by the stomach and intestinal tract. Symptoms include a burning sensation of the mouth and esophagus, nausea, vomiting, dizziness, staggering gait, drowsiness, loss of consciousness and delirium, as well as additional central nervous system (CNS) effects. Due to its light viscosity, there is a danger of aspiration into the lungs during vomiting. Aspiration can result in severe lung damage or death.**Chronic Effects:** Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. This product contains ethyl benzene. The International Agency for Research on Cancer (IARC) has evaluated ethyl benzene and classified it as a possible human carcinogen (group 28) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. This product contains naphthalene. The IARC evaluated naphthalene and concluded that there was sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. Accordingly, IARC classified naphthalene as a possible human carcinogen. (Group 28). The US National Toxicology Program (NTP) has evaluated naphthalene and found that it may be reasonably anticipated to be a human carcinogen.**SECTION 4 – FIRST AID MEASURES**

Take proper precautions to ensure your own health and safety before attempting to rescue or provide first-aid.

**Skin:** Remove contaminated clothing. Flush exposed area with mild soap and water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.**Eyes:** Flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. If easily accomplished, check for and remove contact lenses. If contact lenses cannot be removed, seek immediate medical attention. Do not use eye ointment. Seek medical attention.**Inhalation:** Move to fresh air. Administer artificial respiration if breathing has stopped. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, 100% humidified oxygen should be administered by a qualified individual. Seek medical attention immediately.**Ingestion:** Do NOT induce vomiting. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.

**SECTION 5 – FIRE FIGHTING MEASURES****NFPA Flammability Classification:** NFPA Class II Combustible liquid**Flash point (Closed cup Method Used):** 42°C-108°F.**Lower Flammable Limits:** AP 0.5%**Upper Flammable Limits:** AP 6%**Auto-ignition Temperature:** 230°C-446°F**Hazardous Combustion Products:** Carbon dioxide, carbon monoxide, smoke, fumes, and/or unburned hydrocarbons.**Special Properties:** Combustible Liquid! This material releases vapors when heated above ambient temperatures. Vapors can cause a flash fire. Vapors can travel to a source of ignition and flashback. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. Use only with adequate ventilation. If container is not properly cooled, it can rupture in the heat of a fire.**Extinguishing Media:** Small fire: Use dry chemicals, carbon dioxide, foam, or inert gas (nitrogen). Large fire: use foam, water fog, or water spray. Do not use a solid stream of water directly on the fire as the water may spread the fire to a larger area.**Fire Fighter Protection:** Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities of potential fire and explosion hazard if liquid enters sewers or waterways.**SECTION 6 – ACCIDENTAL RELEASE MEASURES****Land Spill:** Eliminate sources of ignition. Prevent additional discharge of material. For small spills, implement cleanup procedures. For large spills, implement cleanup procedures and, if in public area, keep public away and advise authorities. If this product is subject to CERCLA reporting, notify the National Response Center. Prevent liquid from entering sewers, waterways, or low areas. Contain spilled liquid with sand or earth. Do not use sawdust or combustible materials. Recover by pumping, using an explosion proof or hand pump, or with a suitable absorbent. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.**Water Spill:** Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Remove from surface with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-confined waters. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.**SECTION 7 – HANDLING AND STORAGE****Steps to be taken in case material is spilled:** Evacuate area, ventilate and avoid breathing vapors. Contain the spill. Mop up or otherwise absorb and hold in closed container for disposal.**Waste Disposal Method:** Any method in accordance with local applicable law.**Precautions to be taken in handling and storing:** Avoid possibility of contact with sparks or open flame, electric arcs or other hot emissions which may cause thermal decomposition. Keep containers closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. Do not handle or store near an open flame, heat, or other sources of ignition. Protect material from direct sunlight. Material may accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Do NOT pressurize, cut, heat, or weld containers. Empty containers may contain product residue. Do not reuse empty containers without commercial cleaning or reconditioning. Keep out of reach of children.**SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Read and understand the manufacturer's instructions and the precautionary label on this product.

<b>Respiratory Protection:</b>	Use only in well ventilated areas. NIOSH approved respirators for areas where concentration in air exceeds limits.	<b>Ventilation:</b>	Local exhaust, Provide mechanical ventilation of confined spaces	<b>Protective Gloves:</b>	Chemical resistant gloves, Neoprene, Nitrile or other impervious plastic.
<b>Eyes:</b>	Safety glasses with side shield	<b>Other Protective Equipment:</b>	Long sleeves	<b>Work/Hygienic Practices:</b>	N/A

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point</b>	298 - 400° F	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	0.78
<b>Vapor Pressure (mm Hg)</b>	N/A	<b>Melting Point</b>	N/A
<b>Vapor Density (Air = 1)</b>	4.7	<b>Evaporation Rate (Butyl Acetate = 1)</b>	N/A
<b>Vapor Pressure</b>	0.22 mm Hg at 68° V	<b>Volatility</b>	784 g/K /vIC

09/12/11

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<b>Viscosity</b>	Not available	<b>pH</b>	N/A
<b>Solubility in Water</b>	Very slightly soluble in cold water	<b>Appearance and Odor</b>	Colorless liquid with hydrocarbon odor

**SECTION 10 – STABILITY AND REACTIVITY**

<b>Stability:</b>	Stable
<b>Incompatibility (materials to avoid):</b>	Contact with heat, strong acids, strong oxidizers, concentrated oxygen
<b>Hazardous Decomposition:</b>	CO or other innocuous fumes
<b>Hazardous Polymerization:</b>	Will not occur
<b>Conditions to Avoid:</b>	Avoid excessive heat, open flames and all ignition sources

**SECTION 11 – TOXICOLOGICAL INFORMATION**

**Routes of Entry:** Eye contact, inhalation, ingestion. **Skin Contact:** Prolonged or repeated contact may cause defatting and drying of the skin. **Ingestion:** None known. **Inhalation:** Vapors are moderately irritating to the respiratory passages. In rare cases may sensitize heart muscle causing heart arrhythmia. The liquid when accidentally aspirated into the lungs can cause a severe inflammation of the lung. **Eye Contact:** Vapors are moderately irritating to the eyes.

**Toxicity to Animals:**

LD50: Not available.

LC50: Not available.

**Chronic Effects on Humans:** The substance is toxic to lungs, the nervous system.**Other Toxic Effects on Humans:**

Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Slightly hazardous in case of skin contact (permeator).

**Special Remarks on Toxicity to Animals:** Not available.**Special Remarks on Chronic Effects on Humans:** Not available.**SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:** Not available. **BOD5 and COD:** Not available. **Products of Biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. **Toxicity of the Products of Biodegradation:** The products of degradation are more toxic. **Special Remarks on the Products of Biodegradation:** Not available.

**SECTION 13 – DISPOSAL CONSIDERATION**

**Disposal of Waste Method:** Waste management priorities (depending on volumes and concentration of waste) are : (1) recycle (reprocess); (2) energy recovery (cement kilns, thermal power generation); (3) incineration; or (4) disposal at a licensed waste disposal facility. Do not attempt to combust waste on site. Incinerate at a licensed waste disposal site with approval of environmental authority. **Contaminated Packaging:** Empty containers should be recycled or disposed of through an approved waste management facility. Dispose all waste and contaminated equipment in accordance with all applicable federal, state, and local health and environmental regulations.

**SECTION 14 – TRANSPORT INFORMATION**

**DOT (U.S.):** **DOT Shipping Name:** Petroleum Distillates, n.o.s. (Mineral Spirits)  
**DOT Hazardous:** Class 3  
**DOT UN Number:** UN1268  
**DOT Packing Group:** III  
**DOT Reportable Quantity (lbs):** Not available.  
**Marine Pollutant:** No.  
**ICAO/IATA:**  
**IATA Proper Shipping Name:** Petroleum Distillates, n.o.s. (Mineral Spirits)  
**IATA Hazard Class:** 3  
**UN Number:** UN1268  
**Packing Group:** III  
**IATA Label:** Flammable liquid.  
**Remarks:** No additional remark.

**IMDG:** **IMDG Proper Shipping Name:** Petroleum Distillates, n.o.s. (Mineral Spirits)  
**Hazard Class:** 3  
**UN Number:** UN1268  
**Packing Group:** III  
**Marine Pollutant:** No.  
**IMDG Label:** Flammable liquid.

**Remarks:** Not regulated under the Transportation of Dangerous Goods Act when transported by road, rail or a ship on a domestic voyage, in packagings or containers of 450 L or less (waste excluded).

**TDG (Canada):**

**TDG Proper Shipping Name:** Petroleum Distillates, n.o.s. (Mineral Spirits)

**Hazard Class:** 3

**UN Number:** UN1268

**Packing Group:** III

**Note:** Not regulated under the Transportation of Dangerous Goods Act when transported by road or rail in packagings or containers of 450 L or less (waste excluded).

**Marine Pollutant:** No

**Special Provisions for Transport:** No DOT, refer to 49 CFR 173.150

**Identification:** Flammable liquids n.o.s.: UN1993 PG: Not available

#### SECTION 15 – REGULATORY INFORMATION

<b>U.S. TSCA Inventory Status</b>	All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt
<b>Canadian DSL Inventory Status</b>	All components of this product are either on the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL) or exempt
<b>California Proposition 65</b>	Not listed
<b>MA Right-to-Know List</b>	Not listed
<b>New Jersey Right-to-Know List</b>	Not listed
<b>Pennsylvania Right-to-Know List</b>	Not listed
<b>Federal and State Regulations</b>	TSCA 8(b) inventory: Mineral spirits
<b>Other Regulations:</b>	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)
<b>WHMIS</b>	Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F)
	Class D-2A: Material causing other toxic effects (VERY TOXIC)
	Class D-2B: Toxic materials
<b>DSCL (EEC)</b>	R10 – Flammable
	R35/38 – Irritating to eyes and skin
We request that you make all information in this Material Safety Data Sheet available to all employees.	
<b>SARA/TITLE III HAZARD CATEGORIES</b>	If the word “yes” appears next to any category, this product may be reportable by you under the requirements of 40 CFR 370. Please consult those regulations for details.
<b>Immediate (Acute) Health</b>	Yes
<b>Delayed (Chronic) Health</b>	No
<b>Fire Hazard</b>	No
<b>Reactive Hazard</b>	No
<b>Sudden Release of Pressure</b>	No
<b>INTERNATIONAL REGULATIONS</b>	Consult the regulations of the importing country.

**KEY:** N/A – Not Applicable      ND – Not Determined      NE – Not Estimated

#### SECTION 16 – OTHER INFORMATION

The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the user. No suggestions for use are intended as, and nothing herein shall be construed as a recommendation to infringe any existing patents or violate any federal, state or local laws, rules, regulations or ordinances.

**MSDS LEGEND:** CAS = Chemical Abstracts Service Registry Number

Ceiling Limit = Ceiling Limit (15 minutes)

OSHA = Occupational Safety and Health Administration

TLV = Threshold Limit Value (ACGIH)

ACGIH = American Conference of Governmental Industrial Hygienists