

STERLING-CLARK-LURTON CORP.
TOLUOL / TOLUENE

143487 Part# 405001
TOLUOL(TOLUENE) SOLVENT,GAL
5604000 STERLING CLARK LURTON
CORP
Buyer: Bernard W. Aubuchon Jr.

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Date Prepared December 5, 2003
Product Number 4050
Medical Emergency Telephone Numbers
Mass Poison Info: 617-232-2120
Chemtrec 800-424-9300

MATERIAL SAFETY DATA SHEET

A. IDENTIFICATION AND EMERGENCY INFORMATION

Product Name Toluol	Product Code 4050
Chemical Name Petroleum solvent	CAS Number 108-88-3
Product Appearance and Odor Clear water-white liquid Aromatic Hydrocarbon Odor	

B. COMPONENTS AND HAZARD INFORMATION

Components	Cas. No. Of Components	Approximate Concentration
This product can be defined as: Toluene / Toluol	108-88-3	100%

See Section E for Health and Hazard information.

See Section H for additional environmental information.

Hazardous Materials Identification System (HMIS)

Health	Flammability	Reactivity	Basis	
1	3	0		Recommended by SCL

Exposure limit for total product	Basis	
100 ppm (375 mg/m ³) for an 8 hour workday		Recommended by SCL
150 ppm (560 mg/m ³) STEL		
200 ppm (300 ppm ceiling; 500 ppm peak)		

C. PRIMARY ROUTES OF ENTRY AND EMERGENCY AND FIRST AID PROCEDURES

Eye Contact If splashed into the eyes, flush with clear water for 15 minutes or until irritation subsides. If irritation persists, call a physician.

Skin In case of skin contact, remove any contaminated clothing and wash skin thoroughly with soap and water.

Inhalation If overcome by vapor, remove from exposure and call a physician immediately. If breathing is irregular or has stopped, start resuscitation, administer oxygen, if available.

Ingestion If ingested, DO Not induce vomiting; call a physician immediately.

D. FIRE AND EXPLOSION HAZARD INFORMATION

Flash Point (Minimum) Flammable - Per DOT 49 CFR 173.115 7°C (45°F) ASTM D 56, tag closed cup	Autoignition Temperature Greater than 538°C (100°F) ASTM D 2155
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National Fire Protection Association (NFPA) - Hazard Identification

Health	Flammability	Reactivity	Basis
2	3	0	

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Handling Precautions

This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas of travel some distance along the ground or surface to ignition sources where they may ignite or explode.

Keep product away from ignition sources, such as heat, sparks, pilot lights, static electricity, and open flames.

Flammable or explosive limits (approximate percent by volume in air)

Estimated values: Lower Flammable limit 1% Upper Flammable limit 7.1%

Extinguishing Media and Fire Fighting Procedures

Foam, water spray (fog), dry chemical, carbon dioxide and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on size of potential size of fire and circumstances related to the situation.

Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's "Fire Protection Fire Protection Guide on Hazardous Materials", Eighth Edition (1984)

Use dry chemical, foam or carbon dioxide to extinguish the fire. Water may be ineffective, but water should be used to keep fire-exposed containers cool. If a leak or spill has ignited, use water spray to disperse the vapors and to protect men attempting to stop a leak. Water spray may be used to flush spills away from exposures. Minimize breathing or gases, vapor, fumes or decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.

NOTE: The inclusion of the phrase "water may be ineffective": is to indicate that although water can be used to cool and protect exposed material, water may not extinguish the fire unless used under favorable conditions by experienced fire fighters trained in fighting all types of flammable liquid fires.

Decomposition products under fire conditions

Fumes, smoke, carbon monoxide, aldehydes and other decomposition products, in the case of incomplete combustion.

"Empty" container warning

"Empty" containers retain 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. Do not attempt to clean since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. For work on tanks refer to Occupational Safety and Health Administration regulations, ANSI A49.1, and other governmental and industrial reference pertaining to cleaning, repairing, welding, or other contemplated operations.

E. HEALTH AND HAZARD INFORMATION

Variability among Individuals

Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists, or fumes should be minimized.

Effects of overexposure (signs and symptoms of exposure)

High vapor concentrations (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory tract, and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

Nature of hazard and toxicity information

WARNING: Concentrated, prolonged or deliberate inhalation of this product may cause nervous system damage.

Prolonged or repeated skin contact with this product tends to remove skin oils, possibly leading to irritation and dermatitis; however, based on human experience and available toxicological data, this product is judged to be neither a "corrosive" nor an "irritant" by OSHA criteria.

Product contacting the eyes may cause eye irritation.

Product has a low order of acute oral and dermal toxicity, but minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possible death.

This product is judged to have an acute oral LD50 (rat) greater than 5 g/kg of body weight, and an acute dermal LD50 (rabbit) greater than 3.16 g/kg of body weight.

Pre-Existing Medical Conditions which may be aggravated by Exposure

Petroleum Solvents/Petroleum Hydrocarbons – Skin contact may aggravate an existing dermatitis.

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F. PHYSICAL DATA

The following data are approximate or typical values and should not be used for precise design purposes.

Boiling Range

110.2 ---.111.0°C (230.4 – 231.8°F)

Vapor Pressure

Approximately 54 mm hg @ 25°C
ASTM D 2879

Specific Gravity (15.6 C/15.6 C)

0.87

Vapor Density (Air=1)

Approximately 3.2

Molecular Weight

92

Percent Volatile by Volume

100 @ 1 ATM. And 25°C (77°F)

PH

Essentially neutral

Evaporation Rate @ 1 ATM and 25°C (77F)

(n-ButylAcetate =1)

1.8

Pour, Congealing or Melting Point

Less than -18°C (0°F)

Pour point by ASTM D 97

Solubility in Water @ 1 ATM and 25 C (77F)

Negligible; less than 0.1%

Viscosity

0.57 c^p @ 25°C ASTM D 445

G. REACTIVITY

This product is stable and will not react violently with water. Hazardous polymerization will not occur. Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite.

H. ENVIRONMENTAL INFORMATION

Steps to be taken in case material is released or spilled

Shut off and eliminate all ignition sources. Keep people away. Recover free product. Add sand, earth or other suitable absorbent to spill area. Minimize breathing vapors. Minimize skin contact. Ventilate confined spaces. Open all windows and doors. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas.

Assure conformity with applicable governmental regulations. Continue to observe precautions for volative, flammable vapors from absorbed material.

The following information may be useful in complying with various state and federal laws and regulations under various environmental statutes:

Reportable quantity (RQ), EPA regulation 40 CFR 302 (Cercla Section 102)

The RQ for Toluol is 1,000 pounds. This product contains approximately 100% Toluol

Threshold planning quantity (TPQ), EPA regulation 40 CFR 355 (SARA Sections 301-304)

No TPQ for product or any constituent greater than 1% or 0.1% (carcinogen).

Toxic chemical release reporting, EPA regulation 40 CFR372 (SARA Section 313)

This product contains approximately 100% Toluol.

Hazardous chemical reporting, EPA regulation 40 CFR 370 (SARA Sections 311-312)

EPA Hazard Classification Code:	Acute Hazard XXX	Chronic Hazard XXX	Fire Hazard XXX	Pressure Hazard	Reactive Hazard	Not Applicable
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I. PROTECTION AND PRECAUTIONS

Ventilation

Use only with ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air. No smoking, flame or other ignition sources.

Respiratory protection

Use supplied-air respiratory protection in confined or enclosed spaces, if needed.

Protective Gloves

Use chemical resistant gloves, if needed, to avoid prolonged or repeated skin contact.

Eye Protection

Use splash goggles or face shield when eye contact may occur.

Other Protective Equipment

Use chemical resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing, which could result in prolonged or repeated skin contact.

Work Practices/Engineering Controls

Keep containers closed when not in use. Do not store near heat, sparks, flame or strong oxidants. To prevent fire or explosion risk from static accumulation and discharge, effectively ground product transfer system in accordance with the National Fire Protection Association standard for petroleum products.

In order to prevent fire or explosion hazards, use appropriate equipment.

Information on electrical equipment appropriate for use with this product may be found in the latest edition of the National Electrical Code (NFPA-70). This document is available from the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269.

Personal Hygiene

Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Remove contaminated clothing, launder or dry-clean before re-use. Remove contaminated shoes and thoroughly clean and dry before re-use. Cleanse skin thoroughly after contact before breaks and meals and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

J. TRANSPORTATION AND OSHA RELATED LABEL INFORMATION

Transportation Incident Information

For further information relative to spills resulting from transportation incidents, refer to latest Department of Transportation Emergency Response Guidebook for Hazardous Materials Incidents, DOT P 5800.0

DOT Identification Number

Toluol/Flammable liquid/UN 1294

OSHA Required Label Information

In compliance with hazard and right-to-know requirements, the following OSHA Hazard Warnings should be found on a label, bill of lading or invoice accompanying this shipment.

DANGER!

FLAMMABLE

NOTE: Product label will contain additional non-OSHA-related information

The information and recommendations contained herein are, to the best of SCL knowledge and belief accurate and reliable as of the date issued. SCL does not warrant or guarantee their accuracy or reliability, and SCL shall not be liable for any loss or damage arising out of the use thereof.

The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. If buyer repackages this product legal council should be consulted to insure proper health, safety and other necessary information is included on the container.

The environmental information included under section H hereof as well as the hazardous materials identification system (HMIS) and National Fire Protection Association (NFPA) ratings have been included by SCL, U.S.A. in order to provide additional health and hazard classification information. The ratings recommended are based upon the criteria supplied by the developers of these rating systems, together with SCL interpretation of the available data.