SAFETY DATA SHEET

1. Product and Company Identification

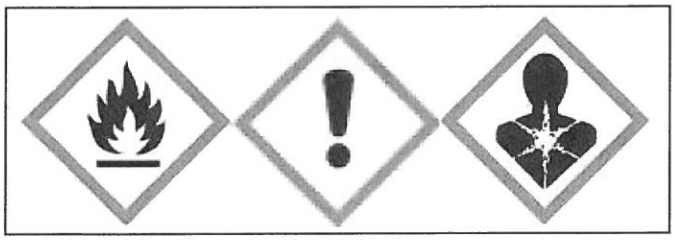
Product Name : TOLUOL
Product Code : 1460N
Recommended Use: Solvent

Company Identification:
SAVOGRAN
259 LENOX STREET
PO BOX 130
NORWOOD, MA 02062-0130
Information Phone: 781-762-5400
Emergency Phone: 800-424-9300
Website Address: www.savogran.com

Synonyms: 405001,405006,Toluene

2. Hazards Identification

Classification:
Flammable liquids: Category 2/Skin irritation: Category 2/Reproductive toxicity: Category 2/Specific target organ toxicity(single exposure): Category 3/Specific target organ toxicity(repeated exposure): Category 2/Aspiration hazard: Category 1



Label Hazard Statement:
DANGER! FLAMMABLE. Vapors may be harmful. Harmful or fatal if swallowed. May affect the brain or nervous system, causing dizziness, headache or nausea. Causes eye, nose, throat and skin irritation. Keep away from heat, sparks and flame.

Potential Health Effects:

Eye:
May cause eye irritation. Symptoms include stinging, tearing, and redness.
Skin:
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" or an "irritant" by OSHA criteria.

Ingestion:
Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation:
Concentrated, prolonged or deliberate inhalation of this product can cause nervous system damage.

Chronic Overexposure Information:
This material is not expected to cause cancer in humans. The ingredients in this material are not listed as a carcinogen by IARC, NTP or OSHA.

Teratology and Reproduction Information:
Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of toluene during pregnancy can cause birth defects in humans.

Aggravation of Pre-Existing Conditions:
Petroleum Solvents/ Petroleum Hydrocarbons - Skin contact may aggravate and existing dermatitis.

OSHA Hazard Communication Standard:
This product is defined as hazardous by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

3. Composition/Information on Ingredients

Component	CAS#	% by Wt.
* TOLUENE ACGIH 20 ppm TWA, A4 OSHA 200 ppm TWA/300 ppm CEILING	108-88-3	95% - 100%

4. First Aid Measures

Eyes:
Rinse with water for 15 minutes. If irritation persists seek medical attention.
Skin:
Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

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

Note to Physicians:

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting.

5. Fire Fighting Measures

Flammable Properties:
DANGER! FLAMMABLE. Keep away from heat, sparks, flame and all other sources of ignition. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and all other sources of ignition during use and until all vapors are gone. Beware of static electricity that may be generated.

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

Extinguishing Media:
Foam, water spray (fog), dry chemical, carbon dioxide and vaporizing liquid type extinguishing agents.

Firefighting Procedures:
The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's "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 of 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.

6. Accidental Release Measures

Small Spill:
Wipe or scrape up any material. Wash area thoroughly with detergent and water; ventilate adequately with good fresh air movement at floor level.

Large Spill:
Wear proper protective equipment. Stop spill at source, dike area of spill to keep from spreading and keep out of ground water and streams. Transfer material to metal containers. Absorb remainder with sand, clay, earth, floor absorbent or other material and shovel into containers. Then wash area thoroughly with water and detergent. Ventilate adequately with good fresh air movement at floor level. Do not restart pilot lights or operate electrical devices or other sources of sparks, flames or heat until all vapors (odors) are gone.

Environmental Precautions:
Prevent spills from entering storm sewers or drains and contact with soil.

Methods/Materials for Containment and Cleaning Up:
Absorb on liquid-absorbing material. Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

7. Handling and Storage

Handling:
Do not breathe material. Keep container closed. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing.Containers of this material may be hazardous when emptied. Since emptied containers retain product residues(vapor and liquid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers should be grounded and/or bonded when material is transferred.

Storage:
Store in cool place, out of hot sun and below 90F. All containers are subject to damage in storage and transit. Damaged containers may start leaking immediately or at a later time. Do not store flammable materials in areas with widely fluctuating temperatures and do not store where vapors may come in contact with flames, sparks, or heat. Flammable materials should not be stored in below ground areas that cannot be adequately ventilated at floor level. Do not use cutting or welding torches near full or empty containers. Closed containers may explode if exposed to extreme heat. Never use internal gas or air pressure to remove contents from a container. Emptied containers may retain product residues (e.g. vapor and liquid or solids); Therefore all precautions given in this sheet must be observed until a container is thoroughly cleaned or destroyed. All containers must be completely drained, (less than one inch of material in the bottom of 55 gallon container) before disposal. If possible emptied container of 55 gallons or more should be given to reconditioner for cleaning.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits: See Section 3

Engineering Controls:
Keep containers closed when not in use. Do not store near heat, sparks, flame or

strong oxidants. To prevent fire or exposion 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 Protective Equipment:

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

Skin Protection:
Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

Eye Protection:
Chemical goggles or safety glasses with side shield. Eye wash stations with safety showers should be readily available. Plastic glasses may be dissolved by paint removers and other solvents.

9. Physical and Chemical Properties

Boiling Point: 230.4 - 231.8
Melting Point: NO DATA
Freezing Point: NO DATA
Vapor Pressure: Approximately 22 mm hg @ 68F
ASTM DD 2879

Vapor Density: Approximately 3.2
Solubility in Water: Negligible; less than 0.1%
Evaporation Rate: NO DATA
Flash Point: 45 Method: ASTM D 56, tag closed cup
Lower explosive limit: 1.2%
Upper explosive limit: 7.0%
Autoignition Temperature: 896F
Specific Gravity: .87
pH(1% in H2O): N/A
Odor: Aromatic Hydrocarbon odor
Appearance:: Clear water-white liquid

10. Stability and Reactivity

Chemical Stability (Conditions to Avoid): Stable

Incompatibility:
Strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite

Hazardous Decomposition Products:
Carbon dioxide and carbon monoxide, various hydrocarbons.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

Acute:
Oral: LD 50 Rat: >5000 mg/kg
Inhalation: LC 50 Rat: >20 mg/l; 4h
Dermal: LD 50 Rabbit: >5000 mg/kg

Subchronic:
NO DATA

Chronic/Carcinogenicity:
Not listed by ACGIH, IARC, NIOSH, NTP or OSHA

Routes of Exposure:
Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

12. Ecological Information

Environmental Fate: Product is easily volatile.

13. Disposal Considerations

Waste Disposal Method:
Must be disposed of in accordance with local, state and federal regulations.

14. Transport Information

Land Transport (DOT):
UN1294/Toluene/3/PGII

15. Regulatory Information

U.S. Federal Regulations:
TSCA: The intentional ingredients of this product are listed.
OSHA: The intentional regulated ingredients of this product are listed.
CERCLA: SARA Hazard Category: Immediate/Fire
Section 313: This product contains chemicals (Marked * in section 3) which are subject to reporting requirements of Section 313 of Title III of

The Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372

Reportable Quantity: Product Components (Toluene-1000lb)
State Regulations:
New Jersey RTK Label Information: Toluene, 108-88-3
Pennsylvania RTK Label Information: Benzene, Methyl-, 108-88-3

California Proposition 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product contains a chemical(s) known to the state of California to cause cancer, birth defects, or other reproductive harm.

Volatile Organic Compounds: 100% by wt.;869 g/l;7.25 lbs/gallon

16. Other Information:

NFPA Ratings: 2,3,0

Manufacturer Disclaimer:
Judgement of potential hazards of this product is based on information available about individual components listed under section 3 - Ingredients. Direct testing of mixture has not been done. Flash point has been tested. Information given herein is believed to be accurate and is given in good faith. However, no warranty either expressed or implied is made. It is strongly suggested that users confirm in advance of need that the information is current and applicable to their situations.