



24 HOUR EMERGENCY
TELEPHONE NUMBER
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Toluene

SECTION 1 PRODUCT IDENTIFICATION

NAME: Toluene
EVER SCIENTIFIC ORDER NUMBERS: ES608
SYNONYMS: N/I
CAS NO: 108-88-3
FORMULA: C⁶H⁵-CH³
DOT INFORMATION: Proper Shipping Name - "Toluene"
Hazard Class: 3
UN Number: 1294
Packing Group: II
REVISION DATE: 22 January 2007

****LABEL HAZARD STATEMENT AND PRECAUTIONS****

WARNING! FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. MAY BE HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN. MAY CAUSE SKIN OR EYE IRRITATION. Keep away from heat sparks and flame. Keep container tightly closed. Avoid breathing vapor. Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Do not taste or swallow. Wash thoroughly after handling.

SECTION 2 HAZARDOUS INGREDIENTS / EXPOSURE LIMITS

INGREDIENT	OSHA (PEL)	ACGIH (TLV)
Toluene	200 ppm (TWA)	50 ppm (TWA)

Toluene is subject to the reporting requirements of SARA 313 and 40CFR372.

SECTION 3 PHYSICAL / CHEMICAL CHARACTERISTICS

SOLUBILITY IN WATER: .05g/100g of water (20 C) **BOILING POINT (C):** 111
VAPOR PRESSURE (mm Hg): 22@20 C **VAPOR DENSITY:** 3.14
SPECIFIC GRAVITY: 0.86 @ 20°C/4°C **MELTING POINT (C):** -95
EVAPORATION RATE (BuAc=1): ca. 2.24 **pH:** Not Determined
APPEARANCE AND ODOR: Clear, colorless, aromatic liquid.

SECTION 4 FIRE / EXPLOSION HAZARD DATA

NFPA RATINGS: (Estimated) **HEALTH:**2 **FIRE:**3 **REACTIVITY:**0
CONTACT RATING: 1 - mild
FLASH POINT (C): 7 (CC)
AUTOIGNITION TEMPERATURE (C): 422
FLAMMABLE LIMITS (%) UEL: 19 LEL: 3.3

EXTINGUISHING MEDIA: Water spray, dry chemical, "alcohol" foam, CO₂.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear self-contained breathing apparatus with full face-piece operated in pressure-demand or other positive-pressure mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Above flash point, vapor-air mixtures can be explosive within flammable limits indicated. Contact with strong oxidizers may cause fire. Sensitive to static discharge.

SECTION 5 REACTIVITY DATA

STABILITY: Stable under normal conditions. Containers may burst under heated conditions.

CONDITIONS TO AVOID: Excessive heat, sunlight, ignition sources and incompatibles.

MATERIALS TO AVOID: Concentrated nitric and sulfuric acid mixtures, oxidizing materials, chloroforms, nitrogen tetra oxide, alkali materials, acids, potassium t-butoxide. Will erode some plastic and rubber materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide and carbon monoxide may form when heated to decomposition

HAZARDOUS POLYMERIZATION: Does not occur.

SECTION 6 HEALTH HAZARD DATA

ROUTES OF ENTRY AND POTENTIAL EFFECTS OF OVEREXPOSURE

INHALATION: Vapor inhalation causes respiratory tract irritation. May cause drowsiness, loss of appetite, inability to concentrate. High concentrations can produce central nervous system depression, narcosis and unconsciousness. Numbness of extremities is often seen.

SKIN CONTACT: Causes drying of skin and potentially severe irritation with prolonged skin exposure. May be absorbed through skin.

EYE CONTACT: May cause irritation.

INGESTION: Swallowing in large amounts may cause abdominal pain, nausea, headache, vomiting. Lung exposure can produce severe lung damage and is considered a medical emergency.

CHRONIC EXPOSURE: Prolonged exposure can cause skin irritation. In rare cases may result in decreased blood cell count and anemia. Exposure to this material may affect a developing fetus.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Exposure may increase the toxic effects of chlorinated hydrocarbons, such as chloroform. Alcoholic beverage consumption may enhance the toxic effects of this solution.

CARCINOGENICITY: None

****FIRST AID PROCEDURES****

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes. Get medical attention.

SKIN CONTACT: Immediately flush with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Get medical attention for persistent irritation.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

INGESTION: Aspiration hazard. If ingested, vomiting may occur spontaneously. If individual is not already vomiting do not induce. Keep individuals head below their lungs by seating head between knees. **Call physician as soon as possible!**

SECTION 7 PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED: Ventilate area and remove sources of ignition. Absorb spill with inert material and containerize for disposal.

WASTE DISPOSAL METHOD: Dispose in accordance with all applicable federal, state, and local environmental regulations.

STORAGE: Store tightly closed in an approved flammable liquid storage area. Store away from sunlight.

SECTION 8 CONTROL MEASURES

VENTILATION: Local preferred.

RESPIRATORY PROTECTION: Full face-piece respirator.

EYE PROTECTION: Chemical splash goggles and/or full face-shield. Maintain eye wash station in area where this reagent is used.

SKIN PROTECTION: Gloves, lab coat and impervious apron as necessary to prevent any skin contact.

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