



**COLUMBUS CHEMICAL INDUSTRIES INC.**

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**Material Safety Data Sheet**

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements

**U.S. Department of Labor**

Occupational Safety and Health Administration  
 (Non-Mandatory Form)  
 Form Approved  
 OMB No. 1218-0072

**IDENTITY** (as Used on Label and List)

**Toluene**

**Note:** Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

**Section I**

Manufacturers /Distributor Address Number Street City State and Zip Code	Emergency Telephone Number
Columbus Chemical Industries, Inc.	CHEMTREC 1-800-424-9300
N4335 Temkin Road	Telephone Number for Information
Columbus, WI 53925-0008	920-623-2140
	Date Prepared
	04-27-2006
	Signature of Preparer (optional)

**Section II - Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Toluene <sup>*,**</sup>	108-88-3	200 ppm	50 ppm (skin)	300 ppm (ceiling)	

\*SYNONYMS: Methylbenzene; Methylbenzol; Phenylmethane.

\*\*Subject to the reporting requirements of SARA Title III Section 313.

**Section III - Physical/Chemical Characteristics**

Boiling Point	110.6°C (231°F)	Specific Gravity (H <sub>2</sub> O = 1)	0.8650
Vapor Pressure (mm Hg) @ 20 °C (68 °F)	10 mmHg	Melting Point	-93 °C (-135 °F)
Vapor Density (AIR = 1)	3.2	Evaporation Rate (Butyl Acetate = 1)	>1
Solubility in Water	0.05g / 100mL		
Appearance and Odor	Opaque, colorless liquid with aromatic odor.		

**Section IV Fire and Explosion Hazard Data**

Flash Point (Method Used)	Flammable Limits	LEL	UEL
7 °C (45 °F); closed cup. Autoignition Temp.: 536°C (997°F)	(% by volume)	1%	7%
Extinguishing Media	Carbon dioxide, dry chemical powder, water spray, appropriate foam.		
Special Fire Fighting Procedures	In the event of a fire, wear full protective clothing and NIOSH/MSHA-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Prevent contact with skin and eyes.		
Unusual Fire and Explosion Hazards	Emits toxic fumes under fire conditions. Vapor can cause flash fire. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. Container explosion may occur under fire conditions.		

**Section V Reactivity Data**

Stability	Unstable		Conditions to Avoid	Heat, ignition sources, fire, oxidizing agents.
	Stable	X		

**Incompatibility Materials to Avoid**

Oxidizing agents, acids, water reactive substances.

**Hazardous Decomposition or Byproducts**

Carbon monoxide, carbon dioxide.

**Hazardous Polymerization****Conditions to Avoid**

	May Occur		Not applicable
	Will Not Occur	X	

**Section VI Health Hazard Data**

Routes of Entry	Inhalation ?	Skin ?	Ingestion ?
	Yes	Yes	Yes

**Health Hazards (Acute and Chronic)**

SKIN: May cause irritation and may be harmful if absorbed through the skin. EYE CONTACT: Causes severe eye irritation. INHALATION: Breathing can cause irritation, edema, central nervous effects, inflammation and ulceration of penis. INGESTION: Progressive central nervous effects including brain, damage to bladder, kidneys and liver.

Carcinogenicity	NTP	IARC Monographs	OSHA REGULATED?
	Not Listed	Group 3	Not Listed

**Signs and Symptoms of Exposure.**

Burning sensation of mucous membranes. Headache, nausea, vomiting, dizziness, drowsiness, unconsciousness, delirium, weakness, disorientation, lung irritation, edema, chest pains, gastrointestinal disturbances, difficulty breathing, eye irritation, skin irritation.

**Medical Conditions Generally Aggravated by Exposure**

Persons with preexisting central nervous system (CNS) disease, neurological conditions, skin disorders, bladder or liver or kidney dysfunction, or chronic respiratory diseases should avoid exposure.

**Emergency and First Aid Procedures** INGESTION: If swallowed, wash out mouth with water, call a physician. Do not leave victim unattended. EYES: In case of contact, immediately flush with large amounts of water for at least 15 minutes. Call physician. INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call physician. SKIN: Immediately wash skin with soap and large amounts of water.

**Section VII Precautions for Safe Handling and Use****Steps to be Taken in Case Material is Released or Spilled**

Evacuate area. Wear NIOSH/MSHA-approved respirator, chemical-resistant goggles, rubber boots, apron and heavy rubber gloves. Contain spill with dikes, sand or noncombustible absorbent material. Sweep up and place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

**Waste Disposal Method** Dispose in accordance with all Federal, state, and local regulations.

**Precautions to be Taken in Handling and Storing**

Keep in tightly closed plainly-labelled containers, stored in a cool, dry, ventilated area. Protect against physical damage. Keep away from heat, sparks and flame. Maintain adequate ventilation. Ground all equipment containing this material. HIGHLY FLAMMABLE MATERIAL!

**Other Precautions** Containers, even when empty, will retain residue and vapors which can ignite with explosive force. Always obey hazard warnings and handle empty containers as if they were full.

**Section VII Control Measures**

**Respiratory Protection (Specify Type)** NIOSH/MSHA-approved respirator with organic vapor cartridge.

Ventilation	Local Exhaust	Necessary.	Special	Eyewash nearby.
	Mechanical (General)	Recommended.	Other	Safety shower nearby.

**Protective Gloves** Compatible chemical-resistant gloves. **Eye Protection** Chemical Safety goggles.

**Other Protective Clothing or Equipment** Rubber boots, fire-retardant garments and face shield.

**Work /Hygienic Practices** Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area. Avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing. Wash thoroughly after handling. Avoid breathing vapor.

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