



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)

Tolidine (ortho-), Reagent

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

Columbus Chemical Industries

N4335 Temkin Rd

Columbus, WI 53925-0008

Emergency Telephone Number

CHEMTREC 1-800-424-9300

Telephone Number for Information

920-623-2140

Date Prepared

08-31-2006

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)
Hydrogen chloride*	7647-01-0	5 ppm Ceiling	2 ppm Ceiling	Not available	6-7%
Tolidine, o-isomer* ** ***	119-93-7	Not available	Lowest possible Exposure-skin	0.02 mg/m ³ 60 min.Skin	0.1-0.2%

*Subject to SARA Section 313 Reporting Requirements.

**Synonym: 3,3'-Dimethylbenzidine

*** Listed on California's Proposition 65 list of chemicals, cancer.

Section III - Physical/Chemical Characteristics

Boiling Point	Not available	Specific Gravity (H ₂ O = 1)	1.0305
Vapor Pressure (mm Hg)	Not available	Melting Point	Not available
Vapor Density (AIR = 1)	Not available	Evaporation Rate (Butyl Acetate = 1)	Not available

Solubility in Water

Complete.

Appearance and Odor

Colorless liquid which has a sharp irritating odor.

Section IV Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
None		Not applicable	Not applicable

Extinguishing Media

Use extinguishing media appropriate for surrounding fire.

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.

Unusual Fire and Explosion Hazards

Contact with reactive metals may result in the generation of flammable hydrogen gas which is flammable and explosive in air.

Section V Reactivity Data

Stability	Unstable		Conditions to Avoid	Heat, air
	Stable	X		

Incompatibility Materials to Avoid

Alkalis, amines, metals. Material degrades in contact with air.

Hazardous Decomposition or Byproducts

Will yield Hydrogen gas from contact with most metals. Carbon oxides, nitrogen oxides.

Hazardous Polymerization**Conditions to Avoid**

	May Occur		Not available.
	Will Not Occur	X	

Section VI Health Hazard Data

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

Health Hazards (Acute and Chronic)

EYES/SKIN: May cause irritation. **Permeator** **INHALATION:** Cause irritation of the mucous membranes and upper tract. **INGESTION:** May cause digestive tract irritation. May cause burns upon exposure.

Contains a possible cancer causing agent - Tolidine

Carcinogenicity	NTP	IARC Monographs	OSHA REGULATED?
	Reasonably anticipated	Group 2B-possible	Not Listed

Signs and Symptoms of Exposure.

Irritation, especially to mucous membranes of eyes and upper respiratory tract. Itching, redness, staining, swelling of

exposed tissues. Ingestion may cause gastrointestinal pain, diarrhea, nausea and vomiting. **Carcinogen!**

Medical Conditions Generally Aggravated by Exposure

Expected to aggravate asthma, emphysema, other respiratory diseases and existing dermatitis.

Emergency and First Aid Procedures

INGESTION: Wash out mouth with water provided person is conscious. Call a physician immediately. **INHALATION:** Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. **SKIN:** Flush with water for at least 15 minutes. Remove contaminated clothing; call a physician. **EYES:** Flush with large amounts of water for at least 15 minutes, lifting lower and upper eyelids.

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

Evacuate unprotected personnel from area. Ventilate area. Wear approved respirator, rubber boots, heavy protective gloves and chemical safety goggles. Dike spill and neutralize with soda ash or lime. Ventilate and wash spill area when complete.

Waste Disposal Method Dispose of spillage, empty containers, and other materials used for clean up in accordance with all Federal, state, and local regulations.

Precautions to be Taken in Handling and Storing

Store in a cool, dry, well-ventilated area in tightly-closed, plainly-labelled containers. Store in a corrosion-resistant container. Protect against moisture, physical damage and light. Maintain adequate ventilation. Wash thoroughly after handling. Material degrades on exposure to air.

Other Precautions Containers, even when empty, will retain residue and vapors. 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 acid vapor cartridge.

Ventilation	Local Exhaust	Required	Special	Eye wash station.
	Mechanical (General)	Recommended.	Other	Safety Shower.

Protective Gloves Appropriate chemical-resistant gloves. **Eye Protection** Chemical Safety Goggles

Other Protective Clothing or Equipment Rubber apron, boots. Full rubber acid suit. Faceshield.

Work /Hygienic Practices Do **NOT** wear contact lenses. Wash thoroughly after handling. Avoid eye and skin contact. Avoid breathing vapors. Follow safe handling and laboratory practices. Wash hands prior to eating or smoking.

CORROSIVE! Avoid prolonged or repeated contact. **DO NOT INGEST!**

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