



Health	1
Fire	1
Reactivity	0
Personal Protection	G

Material Safety Data Sheet

2,6-Dimethylaniline MSDS

Section 1: Chemical Product and Company Identification

Product Name: 2,6-Dimethylaniline

Catalog Codes: SLD1144

CAS#: 87-62-7

RTECS: ZE9275000

TSCA: TSCA 8(b) inventory: 2,6-Dimethylaniline

CI#: Not available.

Synonym: 2,6-Xylidine; 2,6-Dimethylbenzeneamine; 2,6-Xylyamine; 2-amino-1,3-xylene; 2-Amino-1,3-dimethylbenzene

Chemical Name: 2,6-Dimethylaniline

Chemical Formula: C₈H₁₁N

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
{2,6-}Dimethylaniline	87-62-7	100

Toxicological Data on Ingredients: 2,6-Dimethylaniline: ORAL (LD50): Acute: 840 mg/kg [Rat]. 707 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (permeator), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer), of eye contact (irritant).

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. **MUTAGENIC EFFECTS:** Mutagenic for bacteria and/or yeast. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance may be toxic to blood, kidneys, liver, heart. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: CLOSED CUP: 97°C (206.6°F).

Flammable Limits: LOWER: 1.3% UPPER: 6.9%

Products of Combustion: These products are carbon oxides (CO, CO₂).

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill:

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/

spray. Avoid contact with skin. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:

Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 0.5 (ppm) from ACGIH (TLV) [United States] SKIN TWA: 5 (ppm) from OSHA (PEL) [United States] TWA: 10 (mg/m³) from NIOSH [United States] TWA: 2 (ppm) from NIOSH [United States] TWA: 25 (mg/m³) from OSHA (PEL) [United States] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Not available.

Taste: Not available.

Molecular Weight: 121.18 g/mole

Color: Colorless to yellowish

pH (1% soln/water): Not available.

Boiling Point: 216°C (420.8°F)

Melting Point: 11.2°C (52.2°F)

Critical Temperature: Not available.

Specific Gravity: 0.9842 (Water = 1)

Vapor Pressure: <0.1 kPa (@ 20°C)

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: The product is more soluble in oil; log(oil/water) = 1.8

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether.

Solubility:

Easily soluble in diethyl ether. Very slightly soluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids.

Corrosivity: Not available.

Special Remarks on Reactivity: Incompatible with acid chlorides, halogens, acid anhydrides, hypochlorite, chloroformates

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 707 mg/kg [Mouse].

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: blood, kidneys, liver, heart.

Other Toxic Effects on Humans:

Hazardous in case of skin contact (permeator), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

May affect genetic material (mutagenic). May cause cancer.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause skin irritation. It can be absorbed through the skin. It may be harmful if absorbed through the skin. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract (nose and throat) irritation with coughing and/or shortness of breath. Ingestion: It causes gastrointestinal tract irritation with nausea, vomiting and diarrhea. Exposure through skin absorption, inhalation and ingestion induces methemoglobinemia which affects behavior/central nervous system (CNS depression), respiration, heart, urinary system (kidneys), and blood. Symptoms of methemoglobinemia include hypoxia, apnea, cyanosis (a bluish discoloration of the skin due to deficient oxygenation of the blood), headache, fatigue, dizziness, weakness, lethargy, loss of coordination, dyspnea, coma, and death. Additional signs and symptoms of exposure may include photophobia, visual disturbances, sluggish pupillary reaction, tinnitus, speech disturbances, anorexia, nausea, colicky pain, muscle pain, faintness, paresthesias of the extremities, tremor, seizures, cardiac arrhythmias, tachycardia, and heart block. Urinary signs and symptoms may include painful micturition, hemoglobinuria, methemoglobinuria, hematuria, oliguria, and renal insufficiency, and chocolate-brown blood. Chronic Potential Health Effects: A Heinz-body hemolytic crisis may follow the development of methemoglobinemia. Heart, kidney, and liver damage may occur, possibly as secondary effects of hemolysis.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: 2,6-Dimethylaniline California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: 2,6-Dimethylaniline Pennsylvania RTK: 2,6-Dimethylaniline Massachusetts RTK: 2,6-Dimethylaniline Massachusetts spill list: 2,6-Dimethylaniline New Jersey: 2,6-Dimethylaniline New Jersey spill list: 2,6-Dimethylaniline TSCA 8(b) inventory: 2,6-Dimethylaniline SARA 313 toxic chemical notification and release reporting: 2,6-Dimethylaniline

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 1

Reactivity: 0

Personal Protection: g

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Section 16: Other Information

References:

Registry of Toxic Effects of Chemical Substances Hazardous Substance Data Bank Ariel Global View New Jersey Hazardous Substance Fact Sheet HazardText Meditext

Other Special Considerations: Not available.

Created: 10/09/2005 05:11 PM

Last Updated: 05/21/2013 12:00 PM

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall ScienceLab.com be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if ScienceLab.com has been advised of the possibility of such damages.