1. PRODUCT AND COMPANY IDENTIFICATION

Product name: 2,6-Dimethylaniline
Product Number: D14605
Brand: Aldrich
Supplier: Sigma Aldrich
3950 Spruce Street
SAINT LOUIS MO 63118
USA
Telephone: +1 800-325-5532
Fax: +1 800-325-5552
Emergency Phone # (For both supplier and manufacturers):
(preferred) 1-800-521-8550
(preferred) (314) 776-5555
Preparation Information: Sigma-Aldrich Corporation
Product Safety - Americas Region
1-800-521-8550

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Combustible Liquid, Carcinogen, Target Organ Effect, Harmful by ingestion, Harmful by skin absorption, Irritant

Target Organs
Eyes

Other hazards which do not result in classification
Rapidly absorbed through skin.

GHS Classification
Flammable liquids (Category 4)
Acute toxicity, Oral (Category 4)
Acute toxicity, Inhalation (Category 4)
Acute toxicity, Dermal (Category 4)
Skin irritation (Category 2)
Carcinogenicity (Category 2)
Specific target organ toxicity - single exposure (Category 3)
Acute aquatic toxicity (Category 2)

GHS Label elements, including precautionary statements

Signal word: Warning

Hazard statement(s)
H227: Combustible liquid
H302 + H312 + H332: Harmful if swallowed, in contact with skin or if inhaled
H315: Causes skin irritation.
H335: May cause respiratory irritation.
H401: Toxic to aquatic life.

Precautionary statement(s)
P251: Avoid breathing dust/ fume/ gas/ mist/ vapour/ spray.
P280: Wear protective gloves/ protective clothing.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:
2,6-Xyldiene
2-Amino-m-xylene
2-Amino-1,3-dimethylbenzene

Formula: C₈H₁₁N
Molecular Weight: 121.16 g/mol

Component Concentration

<table>
<thead>
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<tr>
<td>2,6-Xyldiene</td>
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<tr>
<td>CAS-No.</td>
<td>87-82-7</td>
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<tr>
<td>EC-No.</td>
<td>201-759-7</td>
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<tr>
<td>Index-No.</td>
<td>012-161-00-X</td>
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</tbody>
</table>

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If Inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Conditions of Flammability
Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters
Wear self-contained breathing apparatus for fire fighting if necessary.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not allow product to enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

Includes no substances with occupational exposure limit values.

Personal protective equipment
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a half-face respirator with multi-purpose cartridge (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is in the safe means of protection, use a half-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with the product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice. Wash and dry hands.

Immersion protection
Material: butyl-rubber
Minimum layer thickness: 0.3 mm
Break through time: > 480 min
Material tested: Bunite® (Aldrich 2677647, Size M)

Splash protection
Material: Nature latex/chloroprene
Minimum layer thickness: 0.6 mm
Break through time: > 30 min
Material tested: Latex® (Aldrich 2677558, Size M)

data source: KCL GmbH, D-56124 Ichternzell, phone +49 (0)6559 873000, e-mail sales@kcl.de, test method: EN374
If used in solution or mixed with other substances and under conditions which differ from EN374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection
Face shield and safety glasses. Use equipment for eye protection tested and approved to European standards such as EN166 (EU).

Skin and body protection
Complete skin protection against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substances at the specific workplace.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form: liquid
Colour: light yellow

Safety data
pH: 12.5 at 100 g/l at 20 °C (68 °F)
Melting point/freezing point:
Boiling point: 214 °C (417 °F) at 955 hPa (39 mmHg) - lit.
Flash point: 91 °C (196 °F) - closed cup
Ignition temperature: 480 °C (894 °F)
Autoignition temperature: no data available
Lower explosive limit: 1.2 % (V)
Upper explosive limit: 6.9 % (V)
Vapour pressure: 0.20 hPa (0.15 mmHg) at 50 °C (122 °F)
Density: 0.984 g/cm³ at 25 °C (77 °F)
Water solubility: no data available
Partition coefficient: n-octanol/water: log Pow: 1.90
Relative vapour density: no data available
Odour: no data available
Odour threshold: no data available
Evaporation rate: no data available

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
Heat, flames and sparks.

Materials to avoid
acids, Acid chlorides, Acid anhydrides, Oxidizing agents, Chloroformates, Halogens
11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50
LD50 Oral - rat: 340 mg/kg

Inhalation LC50
no data available

Dermal LD50
no data available

Other Information on acute toxicity
no data available

Skin corrosion/irritation
Skin - rabbit: No skin irritation

Sensory damage/eye irritation
Eyes - rabbit: No eye irritation

Respiratory or skin sensitization
no data available

Germ cell mutagenicity

Genotoxicity in vitro - Hamster - ovary

Genotoxicity in vivo - Hamster - ovary

Cytogenetic analysis

Carcinogenicity

Carcinogenic - rat - Oral

Tumorigenic/Carcinogenic by RTECS criteria. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste). Tumors: Tumors. Endocrine Tumors. Limited evidence of carcinogenicity in animal studies

IARC: 2B - Group 2B: Possibly carcinogenic to humans (2,6-Xylylene)
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)
May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available

Aspiration hazard
no data available

Potential health effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: Harmful if swallowed.

Skin: Harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Signs and Symptoms of Exposure
Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. Damage to the eyes. Nausea, Dizziness, Headache, Blood disorders

Synergistic effects

no data available

Additional Information

RTECS: ZE9275000

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish: LC50: Danio rerio (zebra fish) - 143.3 mg/l - 96.0 h

Persistence and degradability

Bioaccumulative potential

Bioaccumulation: Cyprinobiopterin - 48 h

Bioconcentration factor (BCF): 1.8

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1711 Class: 6.1 Packing group II

Proper shipping name: Xylylene, liquid

Reportable Quantity (RQ): Marine pollutant: No
Poison Inhalation Hazard: No

IMDG
UN number: 1711  Class: 6.1  Packing group: II  EMS-No: F-A, S-A
Proper shipping name: XYLIDINES, LIQUID
Marine pollutant: No

IATA
UN number: 1711  Class: 6.1  Packing group: II
Proper shipping name: Xyldines, Liquid

15. REGULATORY INFORMATION

OSHA Hazards
Combustible Liquid, Carcinogen, Target Organ Effect. Harmful by ingestion. Harmful by skin absorption. Irritant

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:

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SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

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Pennsylvania Right To Know Components

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New Jersey Right To Know Components

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California Prop. 65 Components
WARNING! This product contains a chemical known to the State of California to cause cancer.

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16. OTHER INFORMATION

Further Information
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