



Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

MATERIAL SAFETY DATA SHEETS

SECTION I

PRODUCT AND COMPANY IDENTIFICATION

Product: Lidocaine

This MSDS is valid for all grades and catalog #'s

Synonyms: 2-(Dimethylamino)-N-(2,6-Dimethylp
enyl)acetamide; 2-(Diethylamino)-2',6'-acetoxylicidide; alpha-
Diethylamino-2,6-acetoxylicidide; alpha-Diethylamino-2,6-
dimethylacetanilide; alpha-Diethylaminoaceto-2,6-xylidide;
Anestacon; Diethylaminoacet-2,6-xylidide;
Diethylaminoaceto-2,6-xylidide; Duncaine; Gravocain;
Isicaina; Isicaine; Lignocaine; Leostesin; Solcain; Xycaine;
Xylocaine; Xylocain; Xylocitin

Formula: C14-H22-N2-O

Manufacturer: PHARMCO-AAPER
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Brookfield, Connecticut 06804, USA
Phone (203) 740-3471
Fax (203) 740-3481

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Shelbyville, KY 40065
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SECTION II

COMPOSITION /INFORMATION ON INGREDIENTS

% by Material CAS # TLV/PE LC50/LD50
weight L

% by weight	Material	CAS #	TLV/PE L	LC50/LD50
100	Lidocaine	137-58-6	Not available	ORAL (LD50): Acute: 317 mg/kg [Rat]. 220 mg/kg [Mouse].

SECTION III

HAZARDS IDENTIFICATION

Potential Acute Health Effects: Hazardous in case of eye contact (irritant), of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.

Potential Chronic Health Effects: Slightly hazardous in case of skin contact (sensitizer).

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

TERATOGENIC EFFECTS: Classified POSSIBLE for human.

DEVELOPMENTAL TOXICITY: Not available.

The substance may be toxic to cardiovascular system, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

SECTION IV

FIRST AID

Obtain medical attention for all cases of over-exposure.

Eye Contact: Check for and remove any contact lenses. Flush with copious amounts of water for at least 15 minutes. Do not use an eye ointment as a first aid measure. Seek medical attention.

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

Hazardous Skin Contact: Not available.

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

Hazardous 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.

Hazardous Ingestion: Not available.

SECTION V

FIRE FIGHTING MEASURES

Fire:

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

Auto-Ignition temperature: Not available.

Flash point: CLOSED CUP: Higher than 93.3°C (200°F).

Flammable limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Fire Hazards: Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

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

Special Information: As with most organic solids, fire is possible at elevated temperatures. Fine dust dispersed in air

in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

SECTION VI

SPILL/ACCIDENTAL RELEASE MEASURES

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

SECTION VII

HANDLING AND STORAGE

Precautions: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

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

SECTION VIII

EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust 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: Not available.

SECTION IX

PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance: Solid. (Crystalline solid.)

Molecular Weight: 234.34 g/mole

Odor: Characteristic.

Taste: Not available.

Color: White to yellowish.

pH (1% Solution in Water): Not applicable.

Boiling Point: 181°C (357.8°F)

Melting Point: 68.5°C (155.3°F)

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure (mm Hg): Not applicable

Vapor Density (Air=1): Not available.

Volatility: Not available.

Odor Threshold: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Water/Oil Dist. Coefficient: The product is more soluble in oil; $\log(\text{oil/water}) = 2.3$

Ionicity (in water): Not available.

Dispersion Properties: See solubility in water, diethyl ether.

Solubility: Easily soluble in diethyl ether. Insoluble in cold water, hot water. Very soluble in benzene, ethanol, chloroform, and oils

SECTION X

STABILITY/REACTIVITY INFORMATION

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials

Incompatibilities: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Information: Also incompatible with strong mineral acids.

SECTION XI

TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 220 mg/kg [Mouse].

Chronic Effects on Humans: MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: cardiovascular system, central nervous system (CNS).

Other Toxic Effects on Humans: Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.

Special Information on Toxicity to Animals: Not available.

Special Information on Chronic Effects/Toxicity on Humans: May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data. Acute Health Effects:

on other Toxic Skin: May cause skin irritation and numbness (anesthetic effect). When applied to the skin, it produces an anesthetic effect by blocking the signals at the nerve endings of the skin. when compounded with an ointment and applied topically, It may be absorbed by the skin cause systemic effects similar to that of ingestion. Eyes: May cause eye irritation and numbness. Inhalation: Dust may cause respiratory tract irritation and numbness. Ingestion: Harmful if swallowed. May cause abdominal discomfort, nausea, vomiting. May affect behavior/central nervous system (convulsions/seizures, drowsiness, hallucinations, lightheadedness, dizziness, confusion, disorientation, muscle twitching or trembling, somnolence, unusual excitement, unusual tiredness or weakness, nervousness, restlessness), cardiovascular system (hypotension, change in heart rate with possible cardiac arrest). May also cause shortness of breath or trouble

breathing, ringing or buzzing in the ears, feeling hot, cold or numb (numbness of digestive/gastrointestinal tract), increased sweating, blurred or double vision. Chronic Potential Health Effects: Skin: May cause allergic skin reaction with rash, hives, swelling, or abnormal sensation at the site of application. Ingestion/Inhalation: It is rare, but it may cause allergic reaction with cough, difficulty swallowing or tongue swelling, dizziness or fainting, hives or swelling of the eyelids, face or lips; itching or skin rash, stuffy nose, chest tightness, shortness of breath, trouble breathing or wheezing. Medical Conditions Aggravated by Exposure: Hypersensitivity to material; respiratory depression; existing cardiac conditions; broken or inflamed skin, burns, or open wounds at the place of application. More can be absorbed into the body quickly, which increases the chance of side effects; Liver disease (severe). The risk of side effects may be increased because of the slower removal of lidocaine from the body.

SECTION XII 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 Information on Products of Biodegradation: Not available.

SECTION XIII DISPOSAL CONSIDERATIONS

Waste Disposal: Recycle to process, if possible. Consult your local or regional authorities.

SECTION XIV TRANSPORTATION INFORMATION

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

UN: Not applicable.

Special Provisions for Transport: Not applicable.

SECTION XV REGULATORY INFORMATION

Federal and State Regulations: Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312). Components present in this product at a level which could require reporting under the statute are: **NONE** Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual report release of toxic chemicals that appear in 40 CFR 372 (used for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material. Components present in this product at a level which could require reporting under the statute are: **NONE**

Pennsylvania Right-To-Know, Hazardous substance List, Hazardous Substances and Special hazardous Substances on the list must be identified when present in products. Components present in this product at a level which could require reporting under the statute are: **NONE** Massachusetts Right-To-Know, Substance List (MSL) Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. Components present in this product at a level which could require reporting under the statute are: **NONE** Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal or greater than the reportable quantities (RQs) in 40 CFR 302.4. Components present in this product at a level which could require reporting under the statute are: **NONE**

Other Classifications:

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

DSCL (EEC): R22- Harmful if swallowed.

Protective Equipment: Gloves. Lab coat. Dust respirator.

Be sure to use an approved/certified respirator or equivalent. Splash goggles.

References: Not available.

Other Special Considerations: Not available.

The information contained herein is based on data considered to be accurate based on the material as packaged. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It is the user's obligation to determine the conditions of safe use of the product. While this MSDS is based on technical data judged to be reliable, PHARMCO-AAPER assumes not responsibility for the completeness or accuracy of the information contained herein.