



Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064 (800) 955-1177
Emergency Number: (800) 255-3924

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Catalog Numbers: S25125, S25125A
Product Identity: Adipoyl Chloride/Hexane solution

Chemical Family: No Information Available
Synonyms: Diproryl
Recommended Use: Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): Chemtel (800) 255-3924

Issue Date: 08/01/12
Revision Date:

Section 2 – Hazard Identification

Emergency Overview

Harmful or fatal if swallowed, inhaled or absorbed through the skin. May react with water.

Appearance: clear, colorless liquid **Odor:** Characteristic gasoline

Target Organs: Peripheral nervous system, central nervous system

Potential Health Effects/ Routes of Exposure:

Eyes: May cause irritation, redness, pain, tearing, blurred vision and conjunctivitis.

Skin: May cause irritation, burning, redness, blistering and pain.

Ingestion: May cause gastrointestinal irritation, nausea, vomiting, diarrhea, chemical pneumonitis, central nervous system depression, asphyxia, brain damage, and cardiac arrest.

Inhalation: May cause irritation of the respiratory tract, central nervous system depression, dizziness, suffocation, respiratory swelling, pneumonitis, vertigo, hallucinations, fatigue, visual disturbances, muscle weakness chest pains, nervous system disturbances, gastrointestinal disturbances, coughing, breathing difficulty, chest pains, and edema which may be fatal.

Chronic Effect / Carcinogenicity May cause defatting of the skin and dermatitis, adverse reproductive effects, fetal effects, visual disturbances, mutagenic effects, central nervous system abnormalities, muscle weakness, motor incoordination, sensation disturbances, peripheral neuropathy.

Aggravated Medical Conditions No information available

These chemicals are considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

Section 3 – Composition, Information on Ingredients

Adipoyl Chloride, CAS#111-50-2, <3.65% w/v
Hexane, CAS# 110-54-3, >96.33% w/v

Section 4 – First Aid

Eyes: Immediately flush eyes with water for at least 15 minutes. Get medical assistance immediately.

Skin: Flush with water and soap for 15 minutes. Get medical assistance if irritation develops.

Ingestion: Do not induce vomiting unless specified by medical personnel. Get medical assistance immediately.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Notes to Physician Treat symptomatically.

Section 5 – Fire Fighting Measures

Flash Point: -22C **Autoignition Temperature:** 240C

Explosion Limits Upper 8% **Lower** 1.08%

Extinguishing Media: Use dry chemical, foam, or carbon dioxide for extinguishing surrounding fire.

Unsuitable Extinguishing Media: Water may react with this mixture.

Fire & Explosion Hazards This material is extremely flammable. Vapors can flow across ignition source and flashback. Use water spray to blanket fire, cool fire exposed containers. Explosion hazard when exposed to flame, heat, or oxidizer.

Fire Fighting Instructions / Equipment: Use normal procedures. Poisonous gases may be produced in fire. Use protective clothing. Use NIOSH-approved breathing equipment.

Hazardous Combustion Products: No information Available

Sensitivity to mechanical impact No information available.

Sensitivity to static discharge May ignite when exposed to static.

Specific Hazards Arising from the Chemical: Flammable material the vapors may form explosive mixtures with the air, when heated the containers may explode

NFPA Rating: (estimated) Health: 2; Flammable: 3; Reactivity: 0

Section 6 – Accidental Release Measures

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Up Cover with inert material and containerize for disposal. Do not flush to sewer. Wash area with soap and water. Remove all sources of ignition. Provide ventilation. Use non-sparking equipment. Always obey local regulations.

Section 7 – Handling and Storage

Handling: Wash hands after handling. Avoid contact with skin and eyes. Remove clothes and wash before reuse. Avoid inhalation and ingestion. Empty containers may be hazardous since they retain product residue. Keep away from ignition sources. Use with adequate ventilation.

Storage: Keep container tightly closed in a cool, dry, well-ventilated area. Keep away from ignition sources. Protect from moist air and/or water.

Section 8 – Exposure Controls, Personal Protection

Adipoyl Chloride, CAS#111-50-2, ACGIH TLV: NA, OSHA PEL: NA

Hexane, CAS# 110-54-3, ACGIH TLV: 50ppm, OSHA PEL: 1800mg/m³

Engineering Measures/ General Hygiene: Ensure ventilation is adequate. Ensure eyewash and safety showers are available.

Personal Protection Equipment: Skin Protection: Chemical resistant gloves.

Eye/Face Protection: Safety Glasses or goggles. **Respiratory Protection:** If exposure limits are reached use approved respirator

Section 9 – Physical and Chemical Properties

Appearance/Physical State: clear, colorless liquid

Odor: Characteristic gasoline

Boiling Point: 63-68C

Melting Point: Not Available

Vapor Density: 3.0

Evaporation Rate: 8.10

pH: No Information Available

Flammability: No Information Available

Solubility: Insoluble

Relative Density: No Information Available

% Volatility: No Information Available

Specific Gravity: 0.66-0.69

Vapor Pressure: 5.6 @ 100F

Flash Point: -22 C

Coefficient of water/oil distribution: Not Available

Odor Threshold: Not Available

Decomposition Temperature: No Information Available

Partition Coefficient n-octanol/water: Not Available

Molecular Weight: Mixture

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.

Incompatible Materials: Acids, bases, strong oxidizers, selected amines, water and moisture.

Conditions to Avoid: Incompatible materials, excess heat, ignition sources, electrical sparks, moisture.

Hazardous Decomposition Products: carbon monoxide, carbon dioxide, irritating and toxic fumes and gases.

Hazardous Polymerization: Does not occur

Hazardous Reactions: None under normal processing.

Section 11 – Toxicological Information

Routes of Exposure/Symptoms/Corrosiveness – See Section 2

LD50 orl-rat: 25g/kg (Hexane)

LC50 inhalation-rat: 627,000 mg/m³/3min (Hexane)

Irritation: No Information Available

Toxicologically Synergistic: No Information Available

Chronic Exposure

Carcinogenicity No information available

Sensitization No information available.

Mutagenic Effects data cited

Reproductive Effects data cited

Developmental Effects (Immediate/Delayed) No information available.

Teratogenicity No information available.

Other Adverse Effects No information available.

Endocrine Disruptor Information No information available

Section 12 – Ecological Information

Ecotoxicity: Toxic to aquatic life. May cause long-term adverse effects in the aquatic environment.

Persistence and Degradability: No Information Available

Mobility: No Information Available

Bioaccumulation/ Accumulation: No Information Available

Section 13 – Disposal Considerations

Waste Disposal/Waste Disposal of Packaging: Cover with inert material and containerize for disposal. Do not flush to sewer. All chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

Section 14 – Transport Information

DOT – UN2924, FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. (HEXANE, ADIPOYL CHLORIDE), 3 (8), II

Section 15 – Regulatory Information (not meant to be all inclusive)

OSHA Status: These chemicals are considered hazardous by OSHA.

Canada DSL: These chemicals are listed on Canada's DSL list.

TSCA: These chemicals are listed on the TSCA Inventory

SARA Title III Section 313: Not Applicable

RCRA Status: Not Applicable

CERCLA Reportable Quantity: Hexane – 5000lb

WHMIS: B2, D2A

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Additional Information

Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his/her own

particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.