FLINN SCIENTIFIC

10/14/2024: File reviewed, more current MSDS/SDS not available. CAS

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Adipoyl Chloride/Hexane Solution

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261 Chemtrec Emergency Phone Number: (800) 424-9353

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 2). Highly flammable liquid and vapor (H225). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).
Hazard class: Aspiration hazard (Category 1). May be fatal if swallowed and enters airways (H304).
Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314).
Hazard class: Serious eye damage or irritation (Category 2B). Causes eye irritation (H320).
Hazard class: Specific target organ toxicity, single exposure; Narcotic effects (Category 3). May cause drowsiness or dizziness (H336). Avoid breathing mist, vapors or spray (P261).
Hazard class: Reproductive toxicity (Category 2). Suspected of damaging fertility or the unborn child (H361). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Use personal protective equipment as required (P281).
Hazard class: Specific target organ toxicity, single exposure (Category 2). May cause damage to organs (H371).

Do not eat, drink or smoke when using this product (P270).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

| Component Name | CAS Number | Formula | Formula Weight | Concentration |
|------------------------------|------------|--|----------------|---------------|
| Adipoyl chloride | 111-50-2 | ClOC(CH ₂) ₄ COCl | 183.03 | 4.6% (0.25M) |
| Hexanes (mixture of isomers) | 110-54-3 | C ₆ H ₁₄ | 86.18 | 95.4% |

SECTION 4 — FIRST AID MEASURES

If exposed or concerned: Call a POISON CENTER or physician (P309+P313).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313). **If on skin or hair:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). **If skin irritation occurs:** Get medical advice or attention (P332+P313). **If swallowed:** Immediately call a POISON CENTER or physician (P301+P310). Do NOT induce vomiting (P331).

SECTION 5 — FIRE FIGHTING MEASURES

Class IB flammable liquid due to hexanes. Dangerous fire risk. Flash point: -23 °C Flammable limits: Lower: 1.2% Upper: 7.7% Autoignition Temperature: 250 °C

In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).

Signal Word DANGER

Pictograms

NFPA Code

None established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #3. Store with hydrocarbons, oils, esters and aldehydes.

Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor[™] can. Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271). Use explosion-proof electrical and ventilating equipment (P241).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: (as n-hexane) PEL 500 ppm (OSHA), TLV 500 ppm Ceiling 1000 ppm (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless to slightly yellow liquid. Strong odor of hexane.

SECTION 10 - STABILITY AND REACTIVITY

Avoid contact with strong oxidizers, chlorine, fluorine, and magnesium perchlorate. Shelf life: Fair, if stored safely.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: irritation eyes, nose; nausea, headache;ORL-RAperipheral neuropathy: numb extremities, muscle weak;IHL-RAdermatitis; dizziness.SKN-RB

ORL-RAT LD₅₀: 25,000 mg/kg (as hexanes) IHL-RAT LC₅₀: 48,000 ppm/4H (as hexanes) SKN-RBT LD₅₀: N.A.

Chronic effects: Neurological hazard.

Target organs: Eyes, skin, respiratory system, central nervous system, peripheral nervous system

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #18b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Hexanes. Hazard class: 3, Flammable liquid. UN number: UN1993.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (203-777-6), RCRA code D001.

SECTION 16 — OTHER INFORMATION

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N.A. = Not available, not all health aspects of this substance have been fully investigated. N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

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