

For Chemical Emergencies During Transportation:
USA and Canada: Call CHEMTREC 24 Hours at 1-800-424-9300
International: Call CHEMTREC 24 Hours at 1-703-527-3887
Account Number: CCN709805

1. PRODUCT AND COMPANY INFORMATION

Product Name: HEDIONE
Product Code: 27857
CAS #: 24851-98-7

Company Name: The Lermond Company, LLC
13 Raritan Road
Oakland, NJ 07436
Phone: 201-896-3300

2. HAZARD(S) IDENTIFICATION

Physical hazards Not classified.

Health Hazards Not classified.

Environmental hazards Hazardous to the aquatic environment, long-term hazard Category 2



Label elements

Signal word None.

Hazard statement H411 Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention P273 Avoid release to the environment.

Response P391 Collect spillage.

Storage P420 Store away from incompatible materials.

Disposal P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: HEDIONE 100% CAS Number: 24851-98-7

4. FIRST-AID MEASURES

Inhalation: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.

Skin Contact: Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.

Eye Contact: Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eye lids.

Ingestion: Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.

Most important symptoms/effects, acute and delayed: Direct contact with eyes may cause temporary irritation.

Indication of immediate Medical attention and Special treatment needed: Not available.

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. FIRE-FIGHTING MEASURES

Flash Point: 100.00°C (212.00°F)

Suitable Extinguishing Media: Water spray, fog, CO₂, dry chemical, or alcohol resistant foam.

Unsuitable Extinguishing Media: Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the Chemical: Fire may produce irritating, corrosive and/or toxic gases.

Special protective Equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Firefighting equipment/**Instructions:**

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.

Specific methods:

Use water spray to cool unopened containers.

General fire hazards:

Static charges generated by emptying package in or near flammable vapor may cause flash fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up:

Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

Large Spills: Stop the flow of material if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g., cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions:

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. HANDLING AND STORAGE

Safe Handling:

Do not handle or store near an open flame, heat, or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

Safe Storage:

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits:

This substance has no PEL, TLV, or other recommended exposure limit.

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield.
Skin protection:
Hand protection: Wear appropriate chemical resistant gloves.
Other: Wear appropriate chemical resistant clothing. Use of an impervious apron recommended.
Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

General hygiene Considerations: Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear to slightly yellow liquid
Vapor density @ 20°C: Not available.
Relative Density @ 25°C: Not available.
Melting point: Not available.
Flash point: 100.00°C (212.00°F)
Boiling point: 228.2 - 233.6 °F (109 - 112 °C) at 0.2 mmHg

10. STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.
Stability: Material is stable under normal conditions.
Possibility of hazardous Reactions: No dangerous reaction known under conditions of normal use.
Conditions to avoid: Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials: Strong oxidizing agents.
Hazardous decomposition products: No hazardous decomposition products if stored and handled as indicated.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation: Knowledge about health hazard is incomplete.
Skin contact: Causes mild skin irritation.
Eye contact: Knowledge about health hazard is incomplete. Causes mild eye irritation.
Ingestion: Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical, and toxicological Characteristics:

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not known.

Components	Species	Test Results
Hedione		
Presumed Non-Toxic		
<i>Dermal</i>		
LD50	Rabbit	>= 5000 mg/kg (OECD 401)
<i>Oral</i>		
LD50	Rat	>= 5000 mg/kg (OECD 401)

Skin Corrosion/irritation:

Due to partial or complete lack of data the classification is not possible.
Primary Skin irritation (Rabbit, OECD 404, Occlusive): Non-irritant
Acute Eye irritation (Rabbit, OECD 405): Non irritant

Serious eye damage/eye Irritation:

Due to partial or complete lack of data the classification is not possible.
Irritation (ocular, rabbit)(OECD 405): Minimally irritating @ 100%

Respiratory or skin sensitization:

Respiratory sensitization: Due to partial or complete lack of data the classification is not possible.

Skin sensitization: :

Due to partial or complete lack of data the classification is not possible.
Local Lymph Node Assay (LLNA) OECD 429: Non-sensitizing to skin
Guinea pig Maximization test (OECD 406): Non-sensitizing to skin
Human Repeated Insult Patch Test: No effects
Determination of Photo allergenicity in Guinea pig : No effects

Germ cell mutagenicity: :

Bacterial Reverse Mutation test (Ames) (Salmonella + E. Coli, OECD 471, With and without S9, 5 strains): Non mutagenic
Bacterial Reverse Mutation test (Ames) (Salmonella, OECD 471, With and without S9, 5 strains: Non mutagenic
In Vivo Mammalian Erythrocyte Micronucleus Test (Mouse, OECD 474, Intraperitoneal): Non-mutagenic Due to partial or complete lack of data the classification is not possible.

Carcinogenicity:

Due to partial or complete lack of data the classification is not possible.

OSHA specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity:

Due to partial or complete lack of data the classification is not possible.
Combined Repeat. Dose Tox. & Reprod./Develop. Tox. Screening (Rat, OECD 422, Gavage)
NOAEL = 1000 mg/kg/day
NOAEL (fertility) = 1000 mg/kg/day
Prenatal development toxicity study (Rat, OECD 414, Gavage, 21 day(s))
NOAEL = 80 mg/kg/day
NOAEL (development) = 120 mg/kg/day

Specific target organ**toxicity- single exposure:** Due to partial or complete lack of data the classification is not possible.**Specific target organ****toxicity- repeated exposure:**

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard:

Due to partial or complete lack of data the classification is not possible.

12. ECOLOGICAL INFORMATION**Ecotoxicity:** Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Hedione		
Aquatic		
<i>Acute</i>		
Algae		
ErC50	Algae	45.9 mg/l, 72 hours (OECD 201, Static)
NOEC	Algae	11.7 mg/l, 72 hours (OECD 201, Static)
Crustacea	Daphnia magna	1.86 mg/l, 21 days Reproduction Test (OECD 211)
EC50	Daphnia	> 16.1 mg/l, 48 hours (OECD 202)
EC50		8.25 mg/l, 48 hours (OECD 202, Static)
Fish		
LC50	Medaka, high-eyes (<i>Oryzias latipes</i>)	19 mg/l, 96 hours (OECD 203, Semi-Static)

Persistence and degradability:

Ready Biodegradation - Manometric Respirometry Test (OECD 301F, Sludge): Readily biodegradable (89% in 28 day(s))
 Hydrolysis as a Function of pH (OECD 111): Estimated Half-life at pH4 > 1 year
 Hydrolysis as a Function of pH (OECD 111): Estimated Half-life at pH7 > 1 year
 Hydrolysis as a Function of pH (OECD 111): Estimated Half-life at pH9 = 7.80 day(s)

Bio accumulative Potential:

Log Kow = 2.79 (OECD 117)
 Log Kow = 2.81 (OECD 117)
 Log Kow = 2.93 (OECD 107)

Mobility in soil:

No data available.

Other adverse effects:

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS**Disposal instructions:**

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds,

waterways, or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer, and the waste disposal company.

**Waste from residues/
unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

Ground Shipping (DOT): BULK

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (METHYL DIHYDRO JASMONATE)

Hazard Class: 9

UN Number: 3082

Packing Group: III

Ground Shipping (DOT): NON-BULK

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (METHYL DIHYDRO JASMONATE)

Hazard Class: 9

UN Number: 3082

Packing Group: III

Air shipping (IATA): Not regulated as dangerous goods.

Ocean Shipping (IMDG):

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (METHYL DIHYDRO JASMONATE)

Hazard Class: 9

UN Number: 3082

Packing Group: III

15. REGULATORY INFORMATION

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Not listed.

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

16. OTHER INFORMATION

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This safety sheet cannot cover all possible situations that the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or custom