



Slug-Fest All Weather Formula

Safety Data Sheet

Revision Date: September 4th, 2015

1. Identification

1.1 Product Name: Slug-Fest All Weather Formula

1.2 Other Identification:

Chemical Family: Metaldehyde
Formula: $C_8H_{16}O_4$
EPA Registration Number: 71096-4
CAS Number: 108-62-3
Product: 25% Metaldehyde Active Ingredient

1.3 Recommended Uses:

Molluscicide

1.4 Manufacturer:

OR-CAL Inc.
29454 Meadowview Rd.
Junction City, OR 97448
541-689-4413 (Office)
541-689-5026 (FAX)
www.orcalinc.com
EPA Establishment No. 52251-OR-005

1.5 Emergency Contact:

CHEMTREC
1-800-424-9300 (US and Canada)
National Pesticide Information Center:
1-800-858-7378
American Association of Poison Control Centers:
1-800-222-1222

2. Hazards

2.1 Hazard Classification:

Health:

Acute Oral Toxicity	Category 4
Acute Dermal Toxicity	Category 4
Acute Inhalation Toxicity	Category 4
Skin Corrosion/Irritation	Slight Irritant
Eye Damage/Irritation	Minimally Irritating

GHS Hazard Categories:

1(Severe), 2/A (Serious),
3(Moderate), 4(Slight),
5(Minimal)

Physical: Harmful to domestic animals. Slightly toxic to fish on an acute basis. Toxic to Mollusks.

2.2 Signal Word(s):

Caution (USEPA Stamped Label)
Warning (GHS)

2.2.1 Hazard Statement(s):

Harmful if swallowed
Harmful if Inhaled
Harmful to children and fatal to domestic animals when ingested

2.2.2 Symbol(s):



2.2.3 Precautionary Statement:

- Wash hands thoroughly after handling before eating, drinking, chewing gum, using tobacco, or using the toilet.

- Remove clothing immediately if pesticide gets inside, wash the outside of gloves before removing, then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product.
- As soon as possible, wash thoroughly and change into clean clothing after handling or using this product.
- Have the product label or container with you when calling the poison control center or doctor, or going for treatment.
- Avoid breathing mist and use only outdoors in a well-ventilated area.
- This product can be harmful to domestic animals. If ingestion by pet is suspected, bring the product container or label with you to the veterinarian. Go immediately.

2.3 Unclassified Hazard(s): This pesticide is toxic to mollusks (e.g., clams, oysters, scallops, mussels). This pesticide is toxic to birds and mammals.

2.4 Unknown Toxicity Ingredient: None

3. Composition/Information on Ingredient

3.1 Product Composition:

Chemical Name	Formula	CAS No.	WT % A.I.	EINECS No.
Metaldehyde	C ₈ H ₁₆ O ₄	108-62-3	25%	203-600-2
Remaining components	Trade Secret	NA	75%	NA

4. First Aid Measures

4.1 Symptoms/Effects:

Acute: This product can be harmful to children and domestic animals. It is minimally irritating to the eyes, but may cause redness and burning. It is a mild skin irritant and may cause redness and/or chaffing. Inhalation of spray may cause mild irritation of nasal mucous membranes. Ingestion may cause excessive salivation, vomiting, nausea, acetonuria (odor of acetone on breath), convulsions, increased body temperature, depression of medullary respiratory and vasomotor control centers. May result in coma and can be fatal. **Note: Because of low amounts of metaldehyde in this product (25%), it is unlikely the victim can be exposed to sufficient quantities of metaldehyde to have coma or death induced.**

Chronic: Prolonged skin exposure may cause skin irritation.

4.2 Eyes:

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

4.3 Skin:

If on skin: Take off contaminated clothing. Rinse off immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash contaminated clothing before reuse.

4.4 Ingestion:

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Rinse mouth. DO NOT induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

4.5 Inhalation:

If inhaled: Move person to fresh air and keep person comfortable. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

5. Firefighting Measures

5.1 Flammable properties: (See section 9 for additional properties)

Do not introduce heat into a vessel containing Slug-Fest All Weather Formula. Decomposition products of metaldehyde are paraldehyde and acetaldehyde, of which the toxicity is unknown. Acetaldehyde may be oxidized to acetic acid, which may catalyze the decomposition of metaldehyde.

5.2 Extinguishing Media:

- 5.2.1 Suitable Extinguishing Media:
Water, Carbon Dioxide, Dry Chemical
- 5.2.2 Unsuitable Extinguishing Media:
Not Applicable

5.3 Protection of Firefighters:

- 5.3.1 Specific Hazards Arising from the Chemical

Physical Hazards: Dangerous when **dried product** is exposed to heat or flame.

Chemical Hazards:

Heating causes release of carbon dioxide, carbon monoxide, paraldehyde and acetaldehyde gasses.

5.3.2 Protective Equipment and Precautions for Firefighters:

Wear NIOSH approved self-contained breathing apparatus due to the possible presence of gases and the irritating nature of the product.

5.4 Additional Information:

National Fire Protection Association (NFPA) Ratings:

Health	2
Flammability	1
Reactivity	0
Special	N/A

Hazard Rating: 4 (severe), 3 (serious), 2 (moderate), 1 (slight), 0 (minimal.)

6. Accidental Release Measures

6.1 Personal Precautions:

Use Personal Protective Equipment specific in section 8. Remove contaminated clothing and wash affected skin areas with soap and water.

6.2 Environmental Precautions:

Keep spill out of open bodies of water and municipal sewers unless allowed under NPDES (National Pollutant Discharge Elimination System) permit. Do not release into the aquatic environment because this product is toxic to mollusks.

6.3 Methods of Containment

Small Release:

Recover if possible. Do not wash away. If wet, floors may become slippery. To remove residue, wet with water and absorb with absorbent material, package spillage and dispose of according to local, Tribal, State and Federal regulations. Keep spillage from entering sewers and bodies of water. Follow PPE requirements in section 8.

Large Release:

Shut off release if safe to do so. Dike spill area with earth, sand or other inert

absorbent material to prevent runoff into surface waterways (This product is toxic to mollusks).

6.4 Method for Cleanup:

Small Release:

For small areas shovel up absorbed material and place in drums for disposal as a chemical waste according to local, state and federal regulations.

Large Release:

Dike and contain the spill with neutral or alkaline material (e.g. sand, earth, etc.). Transfer as much liquid as possible to containers for recovery using portable pumps and hoses. Transfer contaminated diking material to treatment facility making sure to follow NPDES permit requirements.

7. Handling and Storage

7.1 Handling:

Avoid contact with eyes, skin, or clothing. Fatal if swallowed. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. See section 8 for a complete list of PPE to wear when handling this product.

7.2 Storage:

Store Slug-Fest All Weather Formula in its original container in a cool, locked place out of reach of children. DO NOT ALLOW TO FREEZE. Do not store near food or feed. This product can be fatal to children and dogs (and other domestic animals) if ingested. Dogs have been known to ingest metaldehyde after opening or tearing packaging.

8. Exposure Control/Personal Protection

8.1 Exposure Guidelines:

8.1.1 OSHA (TWA, STEL):

Not listed as an air contaminant in 1910.1000 table Z-1

8.1.2 ACGIH (TLV, STEL):

Not Available

8.2 Engineering Controls:

Use adequate exhaust ventilation to prevent inhalation of product vapors. Keep eye wash/safety shower in areas where commonly used.

8.3 Personal Protective Equipment (PPE):

8.3.1 Eye/Face Protection:

Goggles

8.3.2 Skin Protection:

Coveralls over long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material, chemical resistant footwear plus socks. Wear a chemical resistant apron when mixing, loading or cleaning equipment, and chemical-resistant headgear for overhead exposure.

8.3.3 Respirator Protection:

Not normally needed

8.3.4 Hygiene Considerations:

Wash hands thoroughly after handling this product before eating, drinking, chewing gum, using tobacco, or using the toilet. Change clothing immediately after finished handling this product.

9. Physical and Chemical Properties

9.1 Appearance: Creamy White Liquid

9.2 Odor: Mild Aldehyde

9.3 Odor Threshold: Not Available

9.4 pH: 6

9.5 Melting Point/Freezing Point: Not applicable

9.6 Boiling Point: Not Available

9.7 Flash Point: Not Available

9.8 Evaporation Rate: (Butyl Acetate=1) Not Available

9.9 Flammability: Not applicable

9.10 Upper/Lower Flammability Limits: Not Applicable

9.11 Vapor Pressure: Not Available

9.12 Vapor Density: (Air=1) Not Available

9.13 Average Relative Density: 1.044 [8.7 Lb. /Gal]

9.14 Water Solubility: 75%

9.15 Partition Coefficient: Not Available

9.16 Auto-ignition Temperature: Not Available

9.17 Decomposition Temperature: Not Available

9.18 Viscosity: 1400 – 5000 cPs @ 25C

9.19 Storage life: At recommended conditions a minimum of 2 years

10. Stability and Reactivity

10.1 Reactivity: Stable

10.2 Chemical Stability: Stable if undiluted and not mixed with other chemicals. Storage life at recommended conditions. Do not store diluted product.

10.3 Possibility of Hazardous Reactions: Hazardous polymerization does not occur.

10.4 Conditions to Avoid: Heat. Decomposition products of metaldehyde are paraldehyde and acetaldehyde. Acetaldehyde may be oxidized to acetic acid, which may catalyze the decomposition of metaldehyde.

10.5 Incompatible Materials: Oxidizing materials

10.6 Hazardous Decomposition Products: Carbon Dioxide, Carbon Monoxide, Paraldehyde and acetaldehyde.

11. Toxicological Information

11.1 Oral: LD50: Between 500 and 5,000 mg/kg

11.2 Dermal: LD₅₀: > 5,000 mg/kg

11.3 Inhalation: LC₅₀: 2.11 mg/L

11.4 Eye: Classified as minimally irritating to the eye

11.5 Chronic/Carcinogenicity: Data not available

11.6 Teratology: Data not available

11.7 Reproduction: Data not available

11.8 Mutagenicity: Data not available

12. Ecological Information

12.1 Ecotoxicity: Metaldehyde is used to protect a wide variety of plant types. No adverse ecological incidents have been reported with regard to metaldehyde and terrestrial plants. (USEPA)

12.2 Persistence & Degradability: Metaldehyde is highly mobile in soils, and is generally stable to abiotic degradation mechanisms such as hydrolysis and photolysis (USEPA).

12.3 Bioaccumulative Potential: This product is not bioaccumulative. Metaldehyde is primarily dissipated from soils through biodegradation under aerobic conditions, with a half-life of approximately 2 month (USEPA).

12.4 Mobility in Soil: Metaldehyde is highly mobile in soils (USEPA).

12.5 Other Adverse Effects: None known at this time

Note: All Ecological Information derived from United States. Environmental Protection Agency.

Reregistration Eligibility Document for Metaldehyde, 27 July, 2006 <http://www.epa.gov/pesticides/reregistration/REDs/metaldehyde_red.pdf>

13. Disposal Considerations

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency. Consult International, Federal, State, and local agencies for disposal regulations.

14. Transport Information

14.1 Basic Shipping Description:

- 14.1.1 UN Number: Not listed (Metaldehyde 1332)
- 14.1.2 UN proper shipping name: Agriculture NOI-Insecticide or Fungicide (Not regulated by DOT)
- 14.1.3 Class: Class: 60
- 14.1.4 Packing Group: Not applicable
- 14.1.5 Hazardous Substance: No

14.2 Additional Information:

- 14.2.1 Other DOT Requirements: (not regulated by DOT)
 - 14.2.1.1 Reportable Quantity: No
 - 14.2.1.2 Placard(s): Not Applicable
 - 14.2.1.3 Labels(s): Not Applicable
- 14.2.2 USCG Classification: Not Applicable
- 14.2.3 International Transportation:
 - 14.2.3.1 IMO: Not Available
 - 14.2.3.2 IATA: Not Available
 - 14.2.3.3 TDG (Canada): Not Listed
 - 14.2.3.4 ADR (Europe): Slug-Fest All Weather Formula not listed
 - 14.2.3.5 ADG (Australia): Slug-Fest All Weather Formula not listed
 - 14.2.3.6 RR STCC: Not Listed
- 14.2.4 Emergency Response Guide: Guide No. 133 ID No. 1332 (for A.I.)
- 14.2.5 ERAP-Canada: Not Required
- 14.2.6 Special Precautions: Consult appropriate authorities before shipping this product internationally.

15. Regulatory Information

15.1 U.S. Federal Regulations:

- 15.1.1 OSHA: This product meets the criteria of the Federal OSHA Hazard Communication Standard 29 CFR §1910.1200
- 15.1.2 TSCA: Not Listed

15.1.3 CERCLA: Not Listed

15.1.4 SARA Title III:

15.1.4.1 Extremely Hazardous Substance (EHS): Not Listed

15.1.4.2 Section 312 (Tier II) Ratings:

Fire: No

Sudden Release: No

Reactivity: No

Immediate (acute): No

Delayed (chronic): No

15.1.4.1 Section 313 (FORM R): No

15.1.5 RCRA (Resource Conservation & Recovery Act)

Status: Not Applicable

15.1.6 CAA (Hazardous Air Pollutant/HAP): Not Applicable

15.2 International Regulations:

15.2.1 Canada:

15.2.1.1 WHMIS: Pest Control Products not included as defined by the Pest Control Products Act

15.2.1.2 DSL/NDSL: There is no control measure imposed on this substance.

15.3 State Regulations:

CA Proposition 65: Not Listed

16. Other Information

16.1 Use of Substance/Preparation:

16.1.1 Slug-Fest All Weather Formula is used as a molluscicide, or an agent for destroying mollusks. Its active ingredient metaldehyde, once ingested or absorbed by the slugs foot (bottom side) and/or snails foot, disrupts mucous production vital for locomotion, feeding and reproduction, resulting in death.

16.1.2 Shake Slug-Fest All Weather Formula well before mixing. Thoroughly mix spray solution before application. Do not store mixed solution.

16.2 Abbreviations:

ACGIH: American Conference of Gov. Industrial Hygienists

ADG: Australian Dangerous Goods

ADR: Carriage of Dangerous Goods by Road (Europe)

A.I.: Active Ingredient

CAA: Clean Air Act

CAS: Chemical Abstracts Service Registry Number

CERCLA: Comprehensive Environmental Response Compensation and Liability Act

DSL/NDSL: Domestic/Non-Domestic Substance List

ERAP: Emergency Response Assistance Plan (Canada)

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act

GHS: Globally Harmonized System of Classification
IATA: Integrated Approaches to Testing and Assessment
IMO: International Maritime Organization
NA: Not Applicable
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
RCRA: Resource Conservation and Recovery Act
STCC: Standard Transportation Commodity Code
TDG: Transportation of Dangerous Goods (Canada)
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act Inventory
TWA: Time Weighted Average (8 hours)
USEPA: United States Environmental Protection Agency
WHMIS: Workplace Hazardous Materials information System

Revisions: This SDS was reformatted to comply with the new Hazard Communication Standard dated September 4th 2015, by the Regulatory Department of OR-CAL Inc.

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