

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

- 1.1 **PRODUCT IDENTIFIER:** EPA REGISTRATION NO. 7969-105-34704
TRADE NAME: POLYRAM® 80 D5
- 1.2 **RECOMMENDED USE:** FUNGICIDE
- 1.3 **SUPPLIER DETAILS:**
 LOVELAND PRODUCTS, INC.
 P.O. Box 1286 • Greeley, CO 80632-1286
- 1.4 **24 Hour Emergency Phone:** 1-800-424-9300 - **Medical Emergencies:** 1-866-944-8565 – **Product Information:** 1-888-574-2878 (LPI-CUST)
U.S. Coast Guard National Response Center: 1-800-424-8802

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 29 CFR 1910.1200

Acute Toxicity – Oral	Category 4	H302
Acute Toxicity – Inhalation	Category 4	H332
Sensitization – Skin	Category 1B	H317
Acute Toxicity – Dermal	Category 5	H313

2.2 Label elements



Signal word: WARNING
 Hazard Statement: H302 – Harmful if swallowed.
 H332 – Harmful if inhaled.
 H317 – May cause an allergic skin reaction.
 H313 – May be harmful in contact with skin.

Precautionary Statement: (Prevention): P264 – Wash hands and face thoroughly after handling.
 P270 – Do not eat, drink or smoke when using this product.
 P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
 P271 – Use only outdoors or in a well-ventilated area.
 P272 – Contaminated work clothing must not be allowed out of the workplace.
 P280 – Wear protective gloves.

Precautionary Statement: (Response): P301+P312: IF SWALLOWED: Call a poison center/doctor/physician if you feel unwell.
 P330 – Rinse mouth.
 P304+P340: IF INHALED: Remove person to fresh air and keep and keep at rest in a position comfortable for breathing.
 P312 – Call a poison center/doctor/physician if you feel unwell.
 P302+P352: IF ON SKIN: Wash with plenty of water.
 P333+P313 – If skin irritation or rash occurs: Get medical advice/attention.
 P321 – Specific treatment (see First Aid on the product label).
 P363 – Wash contaminated clothing before reuse.

Precautionary Statement: (Storage): Not required (see section 7 for storage information).

Precautionary Statement: (Disposal): P501 – Dispose of contents/container at a recycler or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances.

2.3 Other hazards
 Non known.



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3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Classification according to 29 CFR 1910.1200

Chemical Name:	CAS No.	Concentration [%]
Metiram Complex (Mixture of 5.2 parts by weight (83.9%) of ammoniates of {ethylenebis (dithiocarbamate)}-Zinc with 1 part by weight (16.1%) ethylenebis (dithiocarbamic acid) bimolecular and trimolecular cyclic anhydrosulfides and disulfides	9006-42-2	80.00
Inert ingredients		20.00

*Ingredients not specifically listed are to be considered proprietary or confidential business information per 29 CFR 1910.1200(i)

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

- If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
- 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 treatment advice.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Harmful if swallowed. Harmful if inhaled.

4.3 Immediate Medical Attention and Special Treatment

Treatment: Treat symptomatically. Symptoms may be delayed.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565

Take container, label or product name with you when seeking medical attention.

NOTES TO PHYSICIAN: Treat symptomatically. Symptoms may be delayed.

5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide (CO₂), alcohol foam, foam, water spray or fog.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: Smoke may contain hazardous components. Dust can form explosive mixture in air. Prevent electrostatic charge – may cause ignition.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.



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6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of dusts and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions: This pesticide is acutely toxic to aquatic organisms. May cause long-term effects in the aquatic environment. Do not apply directly to water, or to areas where surface water is present or to inter-tidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment washwaters.
Do not apply this product or allow to drift onto neighboring crops or non-crop area or use in a manner or at a time other than in accordance with label directions because animal, plant or crop injury, illegal residues or other undesirable results may occur.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up: Sweep up dry spills and transfer to approved chemical containers. Avoid breathing dusts. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Flush the area with water to remove any residue. Check local, state and federal regulations for proper disposal.
Never return spills to original containers for re-use.
CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Store in a cool, dry place in original container. Store in a cool, dry place away from excessive heat. Do not put concentrate or dilute into food or drink containers. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (ACGIH) TLVs

Components	Type	Value
No data available	TLV	No listings

U.S. Workplace Exposure Level (OSHA) PELs

Components	Type	Value
PNOC; PNOR*	TWA	5 mg/m ³ (Respirable fraction) 15 mg/m ³ (Total dust)

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Specimen
Not listed		



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8.2 EXPOSURE CONTROLS:

Engineering Measures

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. During aerial application, human flaggers must be in enclosed cabs.

Individual Protection Measures:

Eye / Face Protection: Goggles or shielded safety glasses are recommended.
Skin Protection: Coveralls over long-sleeved shirt and long pants. Chemical-resistant gloves. Shoes plus socks.
Respiratory Protection: Not normally required, if vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved dust mist filtering respirator with any N, R, P, or HE filter. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE: Dry flowable solid.
ODOR: Sulfur-like.
ODOR THRESHOLD: No data available.
COLOR: Brown.
pH: 5 - 7
MELTING POINT / FREEZING POINT: Melting temperature \pm 156 °C
BOILING POINT: Product decomposes; not determined
FLASH POINT: Does not flash.
FLAMMABILITY (solid, gas): No data available.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: No data available.
VAPOR PRESSURE: Negligible.
SOLUBILITY: Dispersible.
PARTITION CO-EFFICIENT, n-OCTANOL / WATER: No data available
AUTO-IGNITION TEMPERATURE: No data available.
DECOMPOSITION TEMPERATURE: No data available.
VISCOSITY: (kinematic): No data available
SPECIFIC GRAVITY (Water = 1): 0.533 g/ml
BULK DENSITY: 33.27 lbs/ft³ | 532.9 kg/m³

Note: These physical data are typical values based on material tested but may vary from sample to sample.
Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

Stable

10.2 CHEMICAL STABILITY

Stable under normal temperature conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No data available. Will not polymerize.

10.4 CONDITIONS TO AVOID

Excessive heat and excess moisture.

10.5 INCOMPATIBLE MATERIALS

Strong bases, strong acids, strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None known.



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11 TOXICOLOGICAL INFORMATION

11.3 LIKELY ROUTES OF EXPOSURE

Harmful if swallowed. Harmful if inhaled.

LC₅₀ (rat): > 2.71 mg/L (4 HR)

LD₅₀ Oral (rat): > 5,000 mg/kg

LD₅₀ Dermal (rat): > 2,000 mg/kg

Acute Toxicity Estimates: No data available

Skin Irritation (rabbit): not an irritant.

Eye Irritation (rabbit): not an irritant.

Specific Target Organ Toxicity: No data available.

Aspiration: No data available

Skin Sensitization (guinea pig): Sensitizer

Carcinogenicity: Not observed in long-term studies.

Germ Cell Mutagenicity: No data available

Interactive Effects: None known

12 ECOLOGICAL INFORMATION

12.3 ECOTOXICITY

The product is toxic to aquatic organisms.

Ecotoxicological Data

	Species	Test Results
Metiram	Oncorhynchus mykiss Daphnia magna	0.336 mg/l (96-hour LD ₅₀) > 583 mg/l (48-hour EC ₅₀)

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water.

Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: No data available.

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Bioaccumulation is not expected.

12.4 MOBILITY IN SOIL

Adsorption to solid soil particles is probable. Potential contamination of groundwater is not expected.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Nonrefillable container. Do not reuse or refill the container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. Do not contaminate water, food or feed by storage or disposal.

14 TRANSPORT INFORMATION

14.3 LAND TRANSPORT

DOT Shipping Description: NOT REGULATED.

U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OTHER THAN POISON (NMFC 102120; CLASS: 60)



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15 REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:

NFPA

HMIS

2 Health

0 Least

2 Health

0 Flammability

1 Slight

0 Flammability

0 Instability

2 Moderate

0 Reactivity

3 High

H PPE

4 Severe

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:

Immediate

Y

Fire

N

Sudden Release of Pressure

N

Delayed

Y

Reactive

N

Reportable Quantity (RQ) under U.S. CERCLA: Not listed.

SARA, Title III, Section 313: Metiram (CAS: 9006-42-2) 80.0%

RCRA Waste Code: Not listed.

CA Proposition 65: **WARNING:** This product can expose you to Metiram, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Harmful if swallowed, inhaled or absorbed through the skin.

Avoid breathing dust or spray mist.

Avoid contact with skin, eyes, or clothing.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Causes moderate eye irritation.

16 OTHER INFORMATION

SDS STATUS: Format revised.

PREPARED BY: Product Stewardship and Regulatory Affairs

REVIEWED BY: Safety, Health and Environment

*Particulates not otherwise classified/regulating

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