

MATERIAL SAFETY DATA SHEET

ZIRAM 85 W PCP 29140

IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR POISONING INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-800-561-8273 or CHEMTREC 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

MANUFACTURED FOR:

LOVELAND PRODUCTS CANADA, INC.
789 Donnybrook Drive • Dorchester, Ontario N0L 1G5

24-Hour Emergency Phone: 1-800-561-8273
Additional Emergency Phone (Canutec): 1-613-996-6666 (Collect)

CHEMICAL IDENTITY: Ziram; zinc bis(dimethyldithiocarbamate)

PRODUCT USE: Fungicide – Group M

PCP REG. NO.: 29140

MSDS Number: 29140-12-LPI

MSDS Revisions: Section 1

Date of Issue: 09/12/12

Supersedes: 01/07/11

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION - POISON. Corrosive. Causes irreversible eye damage. May be fatal if inhaled. Do not get in eyes, on skin, or on clothing. Wear goggles or faceshield and rubber gloves when handling. Do not breathe dust or spray mist. Harmful if absorbed through skin. Skin contact may cause irritation and sensitization. May cause irritation of the nose and throat. Inhalation of dust may cause severe mucous membrane and respiratory irritation. May cause systemic poisoning with symptoms of increasing paralysis, numbness, and weakness in the extremities and death. Wash thoroughly with soap and water after handling, and before eating, drinking or smoking. Primary routes of entry are Inhalation, eye contact and skin contact.

This product is off-white to brown-colored granular solid with negligible odour.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Ziram	85.00	137-30-4	Not listed

4. FIRST AID MEASURES

If in eyes:	Hold eyes 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 centre or doctor for treatment advice.
If on skin or clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for further 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 centre or doctor for further treatment advice.
If swallowed:	Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: No specific antidote. Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-561-8273. Have the product label or container with you when calling a poison control centre or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method):	Not applicable
FLAMMABLE LIMITS (LFL & UFL):	Not established
EXTINGUISHING MEDIA:	CO ₂ , dry chemical, foam, water, or water fog.
HAZARDOUS COMBUSTION PRODUCTS:	Thermal decomposition will generate oxides of carbon, oxides of nitrogen, and sulfur.
SPECIAL FIRE FIGHTING PROCEDURES:	Evacuate all non-emergency personnel from area. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear. Cool containers with water spray and dike area to prevent runoff.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	High concentrations of this product suspended in air may present an explosion hazard.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Wear appropriate protective as described in Section 8 to avoid eye and skin contact and an approved respirator to prevent overexposure. Avoid breathing dusts. Carefully sweep up dry spills and transfer to approved chemical containers for disposal or rework. If liquid, dike surrounding area and absorb with cat litter, sand, or commercial absorbent and transfer to approved chemical containers for disposal. Keep dusting to a minimum. Check local or provincial regulations for proper disposal. Flush the area with water to remove any residue.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Use only with adequate ventilation and appropriate protective equipment. 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 after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Keep out of reach of children and animals. Store in a cool, dry place and avoid excess heat. Store in original containers only. Carefully open containers. After partial use, fold and roll back bags, clamp and close tightly. Do not contaminate water, food or feed by storage and disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: 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 [40CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

RESPIRATORY PROTECTION: Not normally required. If vapors or dusts exceed acceptable levels, wear a NIOSH approved pesticide respirator.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, shoes with socks. Wear rubber or chemical-resistant gloves. A safety shower and eyewash facility should be immediately available.

Personal Protective Equipment: Applicators and other handlers must wear: long sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material, such as PE or PVC, shoes plus socks, protective eyewear, chemical resistant headgear for overhead exposure, a properly fit-tested NIOSH/MSHA approved TC-21C dust/mist filtering respirator with any N, R, P, or HE filter. Follow manufacturer's instructions for cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Ziram	not established	not established
Nuisance Particulates	15 mg/m ³ (total dust)	not established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR: Off-white to brown-coloured granular solid with negligible odour	SOLUBILITY: Insoluble
SPECIFIC GRAVITY (Water = 1): 0.60 g/ml	BULK DENSITY: 600 kg/m ³
VAPOUR PRESSURE: Not established	BOILING POINT: Not applicable
PERCENT VOLATILE (by volume): Not applicable	EVAPORATION RATE: Not applicable

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

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat.

INCOMPATIBILITY: Acids, bases, and preparations containing copper, iron, and mercury.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposed by excessive heat and acids. Thermal decomposition will generate oxides of carbon, oxides of nitrogen, and sulfur. Acid decomposition may evolve carbon disulfide.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (male rat): 2700 mg/kg (similar product)	Acute Dermal LD₅₀ (rabbit) : >2000 mg/kg (similar product)
Eye Irritation (rabbit): Causes irreversible eye damage	Skin Irritation (rabbit): May cause irritation
Inhalation LC₅₀ (male rat): 0.14 mg/L (4H) (similar)	Skin Sensitization (Guinea Pig): Sensitizer

Carcinogenic Potential: Not listed in OSHA, NTP, or ACGIH. IARC lists Ziram in Group 3 (Unclassifiable as to Carcinogenicity in Humans).

Target Organs: Liver and kidneys.

12. ECOLOGICAL INFORMATION

This product is toxic to fish and wildlife. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply when weather conditions favour drift from treated areas. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers for any purpose. Completely empty bag into application equipment. Contact your local dealer/distributor for the location of the nearest collection site. Before taking container to the collection site: make the empty container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT/TDG Shipping Description: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (ZIRAM) 9, UN3077, III ERG GUIDE 171
U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS; NOI; OTHER THAN POISON (NMFC 102120; CLASS: 60)
IMDG Shipping Description: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (ZIRAM) 9, UN3077, III

Consult appropriate ICAO/IATA regulations for shipment requirements in the Air shipping mode.

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:		NFPA		HMIS
3	Health	0	Least	3 Health
1	Flammability	1	Slight	1 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: Ziram (CAS: 137-30-4) 1 lb.

SARA, Title III, Section 313: Zinc Compound (Category: N982) 85.0%

RCRA Waste Code: P205

CA Proposition 65: Not listed

16. OTHER INFORMATION

MSDS STATUS: Section 1 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Safety and Health

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