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MATERIAL SAFETY DATA SHEET
STARBAR® PROLATE®LINTOX®-HD INSECTICIDAL SPRAY AND BACKRUBBER FOR LIVESTOCK

Manufacturer: Wellmark International

Address: 1501 E. Woodfield Rd., Suite 200-West, Schaumburg, IL 60173

Emergency Phone: 1-800-347-8272

Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Starbar® Prolate®/Lintox® HD Insecticidal Spray and Backrubber for Livestock

Chemical Name/Synonym: Phosmet; N-(mercaptomethyl) phthalimide S-(0,0-dimethyl phosphoro-dithioate

Chemical Family: Organophosphorus

Formula: C11 H12 NO4 PS2

EPA Registration No.: 2724-262

RF Number: 242 (Formerly RF 43)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component (chemical, common name)	CAS Number	Weight	Tolerance
Phosmet: (N-(Mercaptomethyl) phthalimide S-(0,0-dimethyl-phosphorodithioate)	732-11-6	11.75%	Not established
Aromatic petroleum solvent (Contains the following)::		88.25%	
Alkylnaphthalenes	68477-31-6		Not established
C10+ alkylbenzenes and tetralins	70693-06-0		Not established
Butanol	71-36-3		50 ppm (OSHA & ACGIH ceiling limit)
Napthalene	91-20-3		10 ppm (OSHA PEL & ACGIH TLV)
Biphenyl	92-52-4		0.2 ppm (OSHA PEL & ACGIH TLV)

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT
KEEP OUT OF REACH OF CHILDREN

DANGER: Corrosive. Causes irreversible eye damage. May be fatal if swallowed. Harmful if absorbed through skin. Causes eye and skin irritation. Do not get in eyes, on skin or on clothing. Wash thoroughly with soap and water after handling. Avoid breathing spray mist. Applicators must wear protective eyewear (goggles, face shield, or safety glasses), long-sleeved shirt, long pants, elbow length waterproof gloves, waterproof apron, and unlined waterproof boots. Remove contaminated clothing and wash clothing before reuse.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Overexposure can cause cholinesterase inhibition. Toxic signs may include headache, blurred vision, weakness, nausea, discomfort in chest, vomiting, abdominal cramps, diarrhea, salivation, sweating, and pin-point pupils.

PRIMARY ROUTE OF ENTRY **Dermal/Eye:** Yes **Oral:** Yes **Inhalation:** No

ACUTE TOXICITY

Oral: LD50 (rat): 362 mg/kg

Dermal: LD50 (rabbit): >2,100 mg/kg (highest dose level tested)

Inhalation: Unknown

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Moderate (rabbit)

Eye Irritation: Severe (rabbit)

Sensitizer: Not considered a sensitizer (guinea pig)

4. FIRST AID MEASURES

Eye: Hold eyelids open and flush with a steady gentle stream of water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

Skin Remove contaminated clothing. Wash skin promptly with plenty of water for15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Inhalation: 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.

Note to Physician: Probably mucosal damage may contraindicate the use of gastric lavage. This product is an organophosphate inhibitor. If signs of cholinesterase inhibition are present, Atropine is antidotal. 2-Pam is also antidotal and may be administered in conjunction with atropine. If ingested, do not induce vomiting. May present aspiration hazard. Usual symptoms of poisoning in man include: headache, blurred vision, weakness, nausea, discomfort in chest, vomiting, abdominal cramps, diarrhea, salivation, sweating and pin point pupils.

5. FIRE FIGHTING MEASURES

NFPA Rating: **Health: 2** **Fire: 2** **Reactivity: 0**

Flammability Class: Combustible liquid

Flash Point: 150F (65.6C)

Explosive Limits (% of Volume): Unknown

Extinguishing Media: Dry chemical, water fog, CO2, foam

Special Protective Equipment: Firefighters should wear full protective clothing including self contained breathing apparatus.

Fire Fighting Procedures: Normal procedures. Do not allow fire fighting water to escape into water-ways or sewers.

Combustion Products: Carbon monoxide, carbon dioxide

Unusual Fire/Explosion Hazards: May decompose under fire conditions and give off toxic irritant

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Wear protective clothing while handling the spill. Provide ventilation, cover with absorbent material, place absorbent and other contaminated materials in container which can be sealed and remove to disposal area. Do not allow spill to reach drains or waterways.

Absorbents: Clay granules, sawdust, dirt or equivalent.

Incompatibles: Strong oxidizers

7. HANDLING AND STORAGE

Handling: Wash thoroughly with soap and water before eating, drinking, or using tobacco. Avoid breathing mist.

Storage: Do not contaminate water or food by storage. Do not use or store near heat or open flame. Protect from temperatures below 20°F.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Ventilation: Use with adequate ventilation.

Personal Protective Equipment: If prolonged exposure is anticipated, handlers should wear a MSHA/ NIOSH approved organic vapor/pesticide respirator, impervious gloves, goggles, and other appropriate clothing to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Light amber to medium brown, solvent odor.

Boiling Point: 440F (226.7C)

Melting Point: Not applicable

Vapor Pressure (mm Hg): Unknown

Density (Air = 1): Unknown

Specific Gravity: 1.036 (H2O=1)

Bulk Density: 8.42 lbs/gal

Solubility: Emulsifies

Evaporation Rate: Unknown

pH: Not known

10. STABILITY AND REACTIVITY

Stability: Stable

Reactivity: Non-reactive

Incompatibility w/ Other Materials: Strong oxidizers

Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides

Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Specific to Active Ingredient(s)]

In a 2-year feeding study in dogs, ingestion of 20, 40 and 400 ppm by weight in feed of technical Phosmet resulted in decreased red cell and plasma cholinesterase activity and lacrimation. One dog in 6 dosed at 400 ppm also showed hyperactivity, salivation, hyperemia of mouth, mucoid feces and mortality. In a 2-year feeding study in rats, ingestion of 20, 40 and 400 ppm of technical Phosmet resulted in reduction in weight gain and liver cell vacuolation. The NOEL was observed at 20 and 40 ppm. Plasma and red cell cholinesterase activity was depressed at 400 ppm in feed.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]
Phosmet was administered to pregnant rats at 0.3, 1.5 and 5 mg/kg. At 5 mg/kg teratogenic and embryotoxic effects were observed. Peroral administration at 1.5 mg/kg produced mild embryotoxic effect. The frequency of stillborns was 10% compared with 4% in controls.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Active Ingredients Only]

Hydrolysis: T 1/2 < 1 day at pH 7

Photolysis: 3 days in air

Soil half life: 3-8 days

Water solubility: 25 ppm at 20C (68F) (phosmet)

ECOTOXICITY [Active Ingredients Only]

Acute Toxicity: fish:LC50 (bluegill): 420 ug/L (96 hour study); aquatic invertebrates:LC50 (daphnids): 5.6 ug/L (48 hour study)
This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters or rinsate. Drift and runoff from treated areas may be hazardous to acquatic organisms in neighboring areas.

13. DISPOSAL CONSIDERATIONS

Pesticide Disposal: 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 by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.
Container Disposal: Triple rinse, (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state an local authorities.

14. TRANSPORT INFORMATION

DOT49CFR Description: For containers < 1 gallon/container: Consumer Commodity, ORM-D. For containers > 1 gallon/container: Organophosphorus pesticides, liquid, toxic, N.O.S. (Phosmet), 6.1 UN3018 PG III

Freight Classification: Insecticides animal, N.O.I. other than poison NMFC 102120, Class 60

15. REGULATORY INFORMATION

CERCLA (Superfund): Reportable Quantity (RQ) - Napthalene = 100 lbs. Butanol = 5000 lbs. , Biphenyl = 1 lb.

RCRA: Not regulated

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritant)

Delayed Health: Yes

Fire: Yes

Sudden Pressure: No

Reactivity: No

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.

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