FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300 **IDENTIFICATION OF THE MATERIAL AND SUPPLIER** 1 **PRODUCT IDENTIFIER:** 1.1 TRADE NAME: **RAMPART® FUNGICIDE** 1.2 RECOMMENDED USE: FUNGICIDE FOR CONTROL OF DOWNY MILDEW AND VARIOUS OTHER DISEASES 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 U.S. Coast Guard National Response Center: 1-800-424-8802 HAZARDS IDENTIFICATION 2 2.1 Classification of the substance or mixture Classification according to 29 CFR 1910.1200 H320 Eye Irritation Category 2B 2.2 Label elements None Signal word: WARNING Hazard Statement: H320 - Causes eye irritation. Precautionary Statement: P262 - Do not get in eyes, on skin, or on clothing. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection. (Prevention): P102 - Keep out of reach of children. Precautionary P305+P351+P338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and Statement: easy to do - continue rinsing. P101 - If medical advice is needed, have the product container or label at hand. (Response): P102 - Keep out of reach of children. P103 - Read label before use. P363 – Wash contaminated clothing before reuse. Precautionary Statement: P401 - Store in a cool, dry place. (Storage): 2.3 Other hazards None known **KEEP OUT OF REACH OF CHILDREN -**Appearance and odor: Clear colorless liquid with no odor. **Potential Health effects** Routes of exposure Eye contact. Eves Causes moderate eye irritation. Skin Harmful in contact with skin. Inhalation Harmful if inhaled. Harmful if swallowed. Ingestion Target organs Eyes. Ingestion. Signs and symptoms Causes moderate eye irritation. Potential environmental effects This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have harmful or damaging effect on the environment.

3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

If in eyes:

Symptoms:

Classification according to 29 CFR 1910.1200

Chemical Name:	CAS No.	Classification	Concentration [%] 53.00
Monopotassium salts of Phosphorous acid Dipotassium salts of Phosphorous acid *Other ingredients	13977-65-6 13492-26-7 n/a	Eye irrit. 2B; H320	47.00

*Ingredients not specifically listed are non-hazardous and 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.

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

Eyes: Causes moderate eye irritation. Oral: Harmful if swallowed.

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: Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

Specific Hazards During Firefighting:

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:

Oxides of carbon, irritating vapors or asphyxiants and other unknown materials may be formed in a fire situation.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS Special Protective Equipment for Firefighters: Self-contained breathing apparatus a

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.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing. 6.2 ENVIRONMENTAL PRECAUTIONS Environmental Precautions: 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 contaminate water when disposing of equipment washwaters. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. 6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP Methods for Clean-Up: Methods for Clean-Up: Avoid contact. Stop leak if without risk. Contain the spill (wear the proper PPE) by absorbing spilled liquid with clay or other absorbent material; scoop or sweep up material and place in container. Decontaminate area by washing with soapy water solution and absorbing the water with absorbent material. Check local, state and federal regulations for proper disposal. Never return spills to original containers for re-use.

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. Do not contaminate water, food, or feed by storage or disposal.

8.	EXPOSURE CONTROLS / PERS	SURE CONTROLS / PERSONAL PROTECTION			
8.1	CONTROL PARAMETERS:				
OC	CUPATIONAL EXPOSURE LIMITS				
	U.S. Workplace Exposure Level (A	CGIH) TLVs			
	Components	́ Туре	Value		
	No data available				
	U.S. Workplace Exposure Level (C	SHA) PELs			
	Components	Туре	Value		
	No data available				
Bio	logical limit values				
	ACGIH Biological Expos	ure Indices			
	Components	Value	Specimen		
	No listings				

8.2 EXPOSURE CONTROLS:

Engineering Measures

Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors and spray mists. Provide eyewash station and safety shower.

Individual Protection Measures:

Eye / Face Protection:	Goggles or shielded safety glasses are recommended.
Skin Protection:	Long-sleeved shirt and long pants. Chemical-resistant gloves. Chemical-resistant footware.
Respiratory Protection:	In case of inadequate ventilation or risk of inhalation of mists or vapors, use suitable respiratory equipment approved
	by MSHA/NIOSH with NIOSH-approved filter media. Wear respiratory protection during operations where spraying or
	misting occurs. 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 :	Liquid
	ODOR:	None.
	ODOR THRESHOLD:	No data available.
	COLOR:	Clear, colorless.
	pH:	6.4
	MELTING POINT / FREEZIN	G POINT: No data available
	BOILING POINT:	No data available
	FLASH POINT:	>212°F (100°C).
	FLAMMABILILITY (solid, gas)	
	UPPER / LOWER FLAMMABI	LITY OR EXPLOSIVE LIMITS: No data available.
	VAPOR PRESSURE:	No data available.
	SOLUBILITY:	Soluble.
	PARTITION CO-EFFICIENT,	n-OCTANOL / WATER: No data available.
	AUTO-IGNITION TEMPERAT	URE: No data available.
	DECOMPOSITION TEMPERA	ATURE: No data available.
	VISCOSITY: (kinematic):	< 100 cps
	SPECIFIC GRAVITY (Water =	= 1): 1.45 g/ml
	BULK DENSITY:	12.1 lbs./gal / 1.45 kg/L
Note:	These physical data are ty	pical values based on material tested but may vary from sample to s

ote: 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
- None known.
- 10.5 INCOMPATIBILE MATERIALS
- Strong oxidizers and water reactive materials.
- **10.6 HAZARDOUS DECOMPOSITION PRODUCTS**

Can decompose at high temperatures and release phosphorous oxides and phosphine.

11 TOXICOLOGICAL INFORMATION

11.3 LIKELY ROUTES OF EXPOSURE

Eye contact. Ingestion. Skin contact. Inhalation. LC_{50} (rat): > 4.1 mg/L (4 HR) LD_{50} Oral (rat): > 5,000 mg/kg LD_{50} Dermal (rabbit): >3,000 mg/kg Acute Toxicity Estimates: No data available Skin Irritation (rabbit): No data available. Eye Irritation (rabbit): Moderate irritant. Specific Target Organ Toxicity: No data available. Aspiration: No data available Skin Sensitization (guinea pig): Not a sensitizer Carcinogenicity: No data available Germ Cell Mutagenicity: No data available Interactive Effects: None known

12 ECOLOGICAL INFORMATION

12.3 ECOTOXICITY

The product may be toxic to fish and aquatic invertebrates. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Information below is based on the technical ingredient 2,4-D acid. **Ecotoxicological Data**

No data available

Species

Test Results

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: No data available.

12.4 MOBILITY IN SOIL

No data available.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at http://www.acrecycle.org/. Do not contaminate water, food or feed by storage or disposal.

14 TRANSPORT INFORMATION

14.3 LAND TRANSPORT

DOT Shipping Description: NOT REGULATED BY DOT

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

15 REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	1 Health 0 Flammability 0 Instability	0 Least 1 Slight 2 Moderate 3 High 4 Severe	1 Health 0 Flammability 0 Reactivity B PPE
SARA Hazard Notification/Reporting SARA Title III Hazard Category:	Immediate <u>Y</u> Delayed <u>N</u>	Fire	<u>N</u> Sudden Release of Pressure <u>N</u>

Reportable Quantity (RQ) under U.S. CERCLA: Not listed SARA, Title III, Section 313: Not listed RCRA Waste Code: Not listed CA Proposition 65: Not listed. 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

Causes moderate eye irritation. Avoid contact with eyes or clothing.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

16 OTHER INFORMATION

SDS STATUS: Format revised.

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

EPA REG. NO.: 34704-924

®Rampart is a registered trademark of Loveland Products, Inc.

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.