

SAFETY DATA SHEET

Ranman™ Fungicide

SDS #: 6267-A
Revision date: 2015-02-23
Format: NA
Version 1



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Ranman™ Fungicide

Other means of identification

Product Code(s) 6267-A

Synonyms 4-chloro-2-cyano-N,N-dimethyl-5-p-tolylimidazole-1-sulfonamide;
4-chloro-2-cyano-N,N-dimethyl-5-(4-methylphenyl)-1H-imidazole-1-sulfonamide

Active Ingredient(s) Cyazofamid

Chemical Family Cyanoimidazole

Recommended use of the chemical and restrictions on use

Recommended Use: Fungicide

Restrictions on Use: Use as recommended by the label

Manufacturer Address

FMC Corporation
1735 Market Street
Philadelphia, PA 19103
(215) 299-6000 (General Information)
msdsinfo@fmc.com (E-Mail General Information)

Emergency telephone number

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)
Medical Emergencies:
1 800 / 331-3148 (PROSAR - U.S.A. & Canada)
1 651 / 632-6793 (PROSAR - All Other Countries - Collect)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not classified

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

The product contains no substances which at their given concentration, are considered to be hazardous to health

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

Very toxic to aquatic life with long lasting effects
May be harmful in contact with skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Cyanoimidazole.

| Chemical name | CAS-No | Weight % |
|----------------------|-------------|----------|
| Cyazofamid technical | 120116-88-3 | 34.5 |

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

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| Eye Contact | Hold eyes open and rinse slowly and gently with water for 15 to 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. |
| Skin Contact | Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice. |
| Inhalation | Move person to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. |
| Ingestion | 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. |
| Most important symptoms and effects, both acute and delayed | None known. |
| Indication of immediate medical attention and special treatment needed, if necessary | Treat symptomatically. |

5. FIRE-FIGHTING MEASURES

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| Suitable Extinguishing Media | Foam. Carbon dioxide (CO ₂). Dry chemical. Water spray or fog. |
| Specific Hazards Arising from the Chemical | |
| Explosion data | |
| Sensitivity to Mechanical Impact | Not sensitive. |
| Sensitivity to Static Discharge | Not sensitive. |
| Protective equipment and precautions for firefighters | As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate downwind. |

6. ACCIDENTAL RELEASE MEASURES

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| Personal Precautions | Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8. |
| Other | For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above. |
| Environmental Precautions | Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains. |
| Methods for Containment | Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. |
| Methods for cleaning up | Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13. |

7. HANDLING AND STORAGE

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| Handling | Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. |
| Storage | Keep in a dry, cool and well-ventilated place Keep away from open flames, hot surfaces and sources of ignition Keep out of reach of children and animals Keep/store only in original container |
| Incompatible products | Iron, Aluminium |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

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| Engineering measures | Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment. |
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Individual protection measures, such as personal protective equipment

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| Eye/Face Protection | For dust, splash, mist or spray exposure, wear chemical protective goggles. |
| Skin and Body Protection | Wear long-sleeved shirt, long pants, socks, and shoes. |
| Hand Protection | Protective gloves |
| Respiratory Protection | For dust, splash, mist or spray exposures wear a filtering mask. |
| Hygiene measures | Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry. |
| General information | If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

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| Appearance | Light tan to tan |
| Physical State | Liquid |
| Color | cream to tan |
| Odor | Slight musty |
| Odor threshold | No information available |
| pH | 6.2 |
| Melting point/freezing point | 152.7 °C (based on active ingredient) |
| Boiling Point/Range | No information available |
| Flash point | Not applicable |
| Evaporation Rate | No information available |
| Flammability (solid, gas) | No information available |
| Flammability Limit in Air | |
| Upper flammability limit: | No information available |
| Lower flammability limit: | No information available |
| Vapor pressure | 0.0000001 torr at 25 °C (based on active ingredient) |
| Vapor density | No information available |
| Density | No information available |
| Specific gravity | 1.154 g/mL |
| Water solubility | 0.107 mg/L at pH 7 @ 20 °C |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | 503 °C / 937 °F (using 100 uL) |
| Decomposition temperature | No information available |
| Viscosity, kinematic | No information available |
| Viscosity, dynamic | No information available |
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Molecular weight | No information available |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY

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| Reactivity | Not applicable |
| Chemical Stability | Stable under recommended storage conditions. |
| Possibility of Hazardous Reactions | None under normal processing. |
| Hazardous polymerization | Hazardous polymerization does not occur. |
| Conditions to avoid | None known |
| Incompatible materials | Iron, Aluminium. |
| Hazardous Decomposition Products | Thermal decomposition can lead to release of irritating and toxic gases and vapors. |

11. TOXICOLOGICAL INFORMATION**Product Information**

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| LD50 Oral | > 5,000 mg/kg (rat) |
| LD50 Dermal | > 2,000 mg/kg (rat) |
| LC50 Inhalation | > 5.9 mg/L 4 hr (species unknown) |
| Serious eye damage/eye irritation | Non-irritating. |
| Skin corrosion/irritation | Non-irritating during normal use (rabbit). |
| Sensitization | Did not cause sensitization on laboratory animals. |

Information on toxicological effects

Symptoms None known.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity No known effect based on information supplied.
Mutagenicity Cyazofamid: Not genotoxic in laboratory studies.
Carcinogenicity Cyazofamid: No evidence of carcinogenicity from animal studies.
Neurological effects Cyazofamid: Not neurotoxic.
Reproductive toxicity Cyazofamid: No toxicity to reproduction in animal studies.
Developmental toxicity Cyazofamid: Not teratogenic in animal studies.
STOT - single exposure Not classified.
STOT - repeated exposure Not classified.
Neurological effects Cyazofamid: Not neurotoxic.
Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Cyazofamid technical (120116-88-3) | | | | |
|---|-----------|-----------|-------|-------|
| Active Ingredient(s) | Duration | Species | Value | Units |
| Cyazofamid | 72 h EC50 | Algae | 0.025 | mg/L |
| | 48 h EC50 | Crustacea | 0.19 | mg/L |
| | 96 h LC50 | Fish | 0.56 | mg/L |
| | 96 h NOEC | Algae | 0.13 | mg/L |
| | 21 d NOEC | Crustacea | 0.11 | mg/L |
| | 21 d NOEC | Fish | 0.13 | mg/L |

Persistence and degradability Cyazofamid: Non-persistent. Readily hydrolyzed. Not readily biodegradable.

Bioaccumulation Cyazofamid: The substance does not have a potential for bioconcentration.

Mobility Cyazofamid: Low mobility; not expected to reach groundwater.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.

Contaminated Packaging Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

14. TRANSPORT INFORMATION

DOT This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.

TDG Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.
UN/ID no UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.
Hazard class 9
Packing Group III
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Cyazofamid), 9, PGIII, Marine Pollutant

ICAO/IATA

| | |
|-----------------------------|--|
| UN/ID no | UN3082 |
| Proper Shipping Name | Environmentally hazardous substance, liquid, n.o.s. |
| Hazard class | 9 |
| Packing Group | III |
| Special Provisions | Not regulated as a hazardous material |
| Description | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Cyazofamid), 9, PGIII, Marine Pollutant |

IMDG/IMO

| | |
|-----------------------------|--|
| UN/ID no | UN3082 |
| Proper Shipping Name | Environmentally hazardous substance, liquid, n.o.s. |
| Hazard class | 9 |
| Packing Group | III |
| EmS No. | F-A,S-F |
| Description | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Cyazofamid), 9, PGIII, Marine Pollutant |

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| 15. REGULATORY INFORMATION |
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U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

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|--|----|
| Acute health hazard | No |
| Chronic health hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

FIFRA Information

This chemical is a pesticide product registered by the 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, 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 contact with skin, eyes, or clothing.

This product is toxic to aquatic organisms.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

