SAFETY DATA SHEET

RanmanTM 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

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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.

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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.

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 **Skin Contact**

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

Treat symptomatically.

needed, if necessary

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Foam. Carbon dioxide (CO₂). 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.

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6. ACCIDENTAL RELEASE MEASURES

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

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

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.

Individual protection measures, such as personal protective equipment

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.

protective equipment suppliers

9. PHYSICAL AND CHEMICAL PROPERTIES

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Information on basic physical and chemical properties

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
Plammability (solid, gas)
No information available
No information available

Flammability Limit in Air

Upper flammability limit:No information availableLower flammability limit:No information available

Vapor pressure 0.0000001 torr at 25 °C (based on active ingredient)

Vapor densityNo information availableDensityNo information available

Specific gravity 1.154 g/mL

Water solubility0.107 mg/L at pH 7 @ 20 °CSolubility in other solventsNo information availablePartition coefficientNo information available

Autoignition temperature 503 °C / 937 °F (using 100 uL)

Decomposition temperatureNo information availableViscosity, kinematicNo information availableViscosity, dynamicNo information availableExplosive propertiesNo information availableOxidizing propertiesNo information availableMolecular weightNo information availableBulk densityNo information available

10. STABILITY AND REACTIVITY

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

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

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Symptoms None known.

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

Chronic toxicityNo known effect based on information supplied. **Mutagenicity**Voyazofamid: Not genotoxic in laboratory studies.

Carcinogenicity Cyazofamid: No evidence of carcinogenicity from animal studies.

Neurological effectsCyazofamid: Not neurotoxic.

Reproductive toxicity Cyazofamid: No toxicity to reproduction in animal studies.

Developmental toxicityCyazofamid: Not teratogenic in animal studies.

STOT - single exposure Not classified. STOT - repeated exposure Not classified.

Neurological effectsCyazofamid: Not neurotoxic.Aspiration hazardNo 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 PackagingContainers 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 ||

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Cyazofamid), 9, PGIII,

Marine Pollutant

ICAO/IATA

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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

15. REGULATORY INFORMATION

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

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, orclothing. 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

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International Inventories

WHMIS Hazard Class Non-controlled

16. OTHER INFORMATION					
NFPA	Health Hazards 0	Flammability 0	Instability 0	Special Hazards -	
HMIS	Health Hazards 0	Flammability 0	Physical hazard 0	Personal Protection X	

40 OTHER INCORMATION

Revision date: 2015-02-23

Revision note (M)SDS sections updated

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End of Safety Data Sheet