

SAFETY DATA SHEET

Verimark 20 SC

SDS #: 130000050053-1-GT-A

Revision date: 2020-07-29

Version 1

Format: BR



Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Verimark 20 SC

Other means of identification

Product Code(s) 130000050053-1-GT-A

UN/ID no UN3082

Synonyms CYANTRANILIPROLE:
3-bromo-1-(3-chloro-2-pyridyl)-4'-cyano-2'-methyl-6'-(methylcarbamoyl)pyrazole-5-carboxanilide (IUPAC name);
3-bromo-1-(3-chloro-2-pyridinyl)-N-[4-cyano-2-methyl-6-[(methylamino)carbonyl]phenyl]-1H-pyrazole-5-carboxamide (CAS name)

Active Ingredient(s) Cyantraniliprole

Formula $C_{19}H_{14}BrClN_6O_2$ (Cyantraniliprole)

Chemical Family Diamide

Recommended use of the chemical and restrictions on use

Recommended Use: Insecticide.

Restrictions on Use: Use as recommended by the label.

Details of the supplier of the safety data sheet

Formulator E.I. DU PONT DE NEMOURS AND COMPANY
CROP PROTECTION
1007 Market Street, Wilmington, Delaware, 19898
United States of America.

Emergency telephone number:

911

Guatemala - Center of Toxicological Information and Assistance - (502) 2251-3560 / 2232-0735

El Salvador - Rosales National Hospital - (503) 2231-9262

Honduras - Hospital School - (504) 232-6105

Nicaragua - National Center of Toxicology - (505) 2289-4700 ext. 1294 cel. 8755-0983

Costa Rica - National Center of Poisoning - (506) 2223-1028; 800-INTOXICA

Panama Center of Research and Information on Medications and Toxicology (507) 523-4948

Dominican Republic - Drug Information and Poisoning Center - (809) 562-6601 Ext. 1801

Section 2: HAZARDS IDENTIFICATION

General Hazards

This material is considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute aquatic toxicity

Category 1

Chronic aquatic toxicity

Category 1

GHS Label elements, including precautionary statements



Signal Word: Warning

Hazard Statements

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

Precautionary Statements - Prevention

P273 - Avoid release to the environment

P391 - Collect spillage

Precautionary Statements - Disposal

P501 - Dispose of contents/container according to label directions

Other Information

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/preparation Mixture

Chemical Family Diamide

Hazardous Components

Chemical name	CAS-No	Weight %
Cyantraniliprole	736994-63-1	18.7
Oxirane, methyl-, polymer with oxirane, monobutyl ester	9038-95-3	1.4

Synonyms are provided in Section 1.

Section 4: FIRST AID MEASURES

FIRST AID MEASURES

General Advice

Do not induce vomiting or give anything by mouth to an unconscious person. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Bring the SDS, product label and package insert when seeking medical assistance.

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

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a poison control center or doctor for further treatment advice.

Inhalation	Move 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	Rinse mouth. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
Protection of first-aiders	Avoid contact by using personal protective equipment. See Section 8 for more detail.

Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed	May cause slight transient irritation at point of contact.
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Indication of any immediate medical attention and special treatment needed

Indication of immediate medical attention and special treatment needed, if necessary	Treat symptomatically.
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Section 5: FIRE FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, dry chemical, carbon dioxide (CO₂), or foam.

Unsuitable extinguishing media

Do not spread material with high pressure water streams.

Specific extinguishing methods

Evacuate area and fight fire from a safe distance. Very toxic to aquatic life with long lasting effects. Dike to prevent runoff.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon oxides (CO_x). Nitrogen oxides (NO_x). Halogenated compounds.

Explosive properties

Sensitivity to Mechanical Impact Not sensitive.

Section 6: ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment.
For emergency responders	Dike to prevent runoff.

Environmental Precautions

Environmental Precautions	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains. Keep out of waterways.
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C. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Dike to prevent runoff.

Methods for cleaning up Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13).

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling

Handling Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Hygiene measures Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products Strong oxidizing agents. Strong bases.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, contains hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Hazardous Components

Chemical name	Brazil	Chile	Argentina	Venezuela	Mexico	ACGIH TLV
Synthetic amorphous silica 112926-00-8		TWA: 5.3 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³		
Sodium Hydroxide 1310-73-2	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³	Mexico: Ceiling 2 mg/m ³	Ceiling: 2 mg/m ³
Crystalline silica, quartz 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.08 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.025 mg/m ³	Mexico: TWA 0.025 mg/m ³	TWA: 0.025 mg/m ³
Methyl ethyl ketone 78-93-3	TWA: 155 ppm TWA: 460 mg/m ³	TWA: 175 ppm TWA: 516 mg/m ³ STEL: 300 ppm STEL: 885 mg/m ³	TWA: 200 ppm STEL: 300 ppm	TWA: 200 ppm STEL: 300 ppm	Mexico: TWA 200 ppm Mexico: STEL 300 ppm	STEL 300 ppm TWA: 200 ppm

Appropriate engineering controls

Engineering measures Ensure adequate ventilation, especially in confined areas.

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 Rubber gloves, nitrile gloves

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

Hygiene measures Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

General information These recommendations apply to the product as supplied. If the product is used in mixtures,

it is recommended that you contact the appropriate protective equipment suppliers.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Liquid
Odor	Odorless
Color	Off-white
Odor threshold	No information available
pH	7.3 (1% solution)
Melting point/freezing point	217 °C
Boiling Point/Range	No information available
Flash point	> 98 °C
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	5.133x10 ⁻¹⁵ Pa@20°C, 1.787x10 ⁻¹⁴ Pa@25°C
Vapor density	No information available
Specific gravity	No information available
Water solubility	12.33 mg/L at pH 7 @ 20 °C
Solubility in other solvents	At 20°C: 6.54 g/L (Acetone), 1.96 g/L (Ethyl acetate), 4.73 g/L (Methanol), 5.05 g/L (Dichloromethane), 0.29 g/L (o-Xylene), 0.000067 g/L (n-Hexane), 0.79 g/L (n-Octanol), 2.45 g/L (Acetonitrile)
Surface tension	No data available
Partition coefficient	No information available
Autoignition temperature	Not flammable >800 °C
Decomposition temperature	318 °C
Viscosity, kinematic	No information available
Viscosity, dynamic	474.3 mPa s @50 rpm
Explosive properties	Not explosive
Corrosivity	No information available
Oxidizing properties	Non-oxidizing
Softening point	No information available
Molecular weight	No data available
VOC content (%)	No information available
Relative density	1.068 g/mL @ 20 °C
Bulk density	No information available

Section 10: STABILITY AND REACTIVITY

Reactivity

None under normal use conditions.

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

Avoid excessive heat or cold.

Incompatible materials

Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products

Carbon oxides (COx). Nitrogen oxides (NOx). Halogenated compounds.

Section 11: TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral > 5000 mg/kg
 LD50 Dermal > 5000 mg/kg
 LC50 Inhalation (dust) > 3.7 mg/L, 4 hr

Information on likely routes of exposure

Inhalation: There are no data available for this product

Eye Contact: May cause slight irritation

Skin Contact: May cause slight irritation

Ingestion: There are no data available for this product

Information on toxicological effects

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

Skin corrosion/irritation: Slightly or non-irritating (rabbit)

Serious eye damage/eye irritation: Slightly or non-irritating (rabbit)

Sensitization: Did not cause sensitization on laboratory animals

Mutagenicity: Cyantraniliprole: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity: Cyantraniliprole: Did not show carcinogenic effects in animal experiments

Reproductive toxicity: Cyantraniliprole: Animals testing did not show any effects on fertility.

Developmental toxicity: Cyantraniliprole: Effects in offspring were only observed at or above dosage levels which resulted in maternal toxicity

Chronic toxicity: Thyroid effects and organ weight changes were observed in rats fed cyantraniliprole for 28 and 90 days.

Target organ effects: Liver Thyroid

Neurological effects: No information available

Aspiration hazard: The product does not present an aspiration pneumonia hazard.

Section 12: ECOLOGICAL INFORMATION

The environmental impact of this product has not been fully investigated. Very toxic to aquatic life with long lasting effects.

Ecotoxicity

Duration	Species	Value	Units
96 h LC50	Fish	> 12.6	mg/L
48 h EC50	Daphnia	20.4	µg/L
72 h EC50	Algae	>13	mg/L
14-day LC50	Earthworm	>1000	mg/kg
96-h LD50 Contact	Bee	> 0.0934	µg/bee
NOEC	Algae	3.2	mg/L
LD50	Bird	>2250	mg/kg

Hazardous Components

Chemical name	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to algae
Cyantraniliprole	28 d NOEC: 2.9 mg/L	21 d NOEC 0.00656 mg/L	

Persistence and degradability: Cyantraniliprole: Not readily biodegradable.

Bioaccumulation: Cyantraniliprole. Not expected to bioaccumulate.

Mobility: Low mobility in soil.

Other Adverse Effects: See product label for additional application instructions relating to environmental precautions

Section 13: DISPOSAL CONSIDERATIONS

Waste disposal methods Pesticide wastes are toxic. 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. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

Contaminated containers and packages Containers must be disposed of in accordance with local regulations. Refer to the product label for container disposal instructions. Do not reuse this container for any other purpose.

Section 14: TRANSPORT INFORMATION

IMDG/IMO:

UN/ID no	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.(Cyantraniliprole)
Hazard class	9
Packing Group	III
Environmental Hazards	Yes

ICAO:

UN/ID no	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.(Cyantraniliprole)
Hazard class	9
Packing Group	III

ICAO/IATA:

UN/ID no	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.(Cyantraniliprole)
Hazard class	9
Packing Group	III

Section 15: REGULATORY INFORMATION

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Propylene glycol 57-55-6	X	X	X	X	X	X	X	X

Oxirane, methyl-, polymer with oxirane, monobutyl ester 9038-95-3	X	X		X	X	X	X	X
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Section 16: OTHER INFORMATION

Revision date: 2020-07-29

Revision note No information available.

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