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Verimark® 20 SC Version 3.0

(replaces: Version 2.0) Revision Date

18.05.2015 Ref. 130000050053

This Safety Data Sheet adheres to the standards and regulatory requirements of the European Community and may not meet the regulatory requirements of other countries.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Verimark® 20 SC

Synonyms : B12922585

DPX-HGW86 200 SC

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Insecticide

1.3. Details of the supplier of the safety data sheet

Company : DuPont International Operations S.a.r.l.

2, chemin du Pavillon

CH-1218 Le Grand-Saconnex / GE

Switzerland

Telephone : +41 (0) 22 717 51 11

Telefax : +41 (0) 22 717 51 09

E-mail address : sds-support@che.dupont.com

1.4. Emergency telephone number

Emergency telephone number : +(44)-870-8200418

: Poison Centres may only possess information required for products in accordance with Regulation (EC) No 1272/2008 and national legislation.

Supplier : Du Pont de Nemours (France) S.A.S.

82, rue de Wittelsheim F-68701 Cernay Cedex

Telephone : +33 (0) 3 89 38 38 38

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute aquatic toxicity, H400: Very toxic to aquatic life.

Category 1

Chronic aquatic toxicity, H410: Very toxic to aquatic life with long lasting effects.

Category 1

Dangerous for the R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects

environment in the aquatic environment.

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2.2. Label elements



Warning

H410 Very toxic to aquatic life with long lasting effects.

Special labelling of certain substances and mixtures Contains: Unspecified Active Agents, Unspecified polyethoxylated fatty alcohols, Poly(methacrylic acid/methyl methacrylate/polyethylene oxide, monomethyl ether), graft / The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:, 5,05 %EUH401: To avoid risks to human health and the environment, comply with the instructions for use.,

P391 Collect spillage.

P501 Dispose of contents to an approved incineration plant in accordance with local,

regional and national legislations.

P501 Dispose of container to a waste disposal plant in accordance with local,

regional and national legislations.

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Registration number Classification according to Directive 67/548/EEC	Classification according to Regulation (EU) 1272/2008 (CLP)	Concentration (% w/w)
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Cyantraniliprole (CAS-No.736994-63-1)

1		
N;R50/53	Aquatic Acute 1; H400	20 %
	Aquatic Chronic 1; H410	

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The above products are compliant to REACH registration obligations; Registration number(s) may not be provided because substance(s) are exempted, not yet registered under REACH or are registered under another regulatory process (biocide uses, plant protection products), etc.

For the full text of the R-phrases mentioned in this Section, see Section 16. For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : Never give anything by mouth to an unconscious person.

Inhalation : Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician

after significant exposure.

Skin contact : Take off all contaminated clothing immediately. Wash off immediately with

soap and plenty of water. In the case of skin irritation or allergic reactions see a

physician. Wash contaminated clothing before re-use.

Eye contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes. If eye

irritation persists, consult a specialist.

Ingestion : Obtain medical attention. DO NOT induce vomiting unless directed to do so by

a physician or poison control center. If victim is conscious: Rinse mouth with

water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms : No cases of human intoxication are known and the symptoms of experimental

intoxication are not known.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO2)

Extinguishing media which shall not be used for safety reasons

: High volume water jet, (contamination risk)

5.2. Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: Hazardous decomposition products formed under fire conditions. Carbon

dioxide (CO2) nitrogen oxides

5.3. Advice for firefighters

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for firefighters

Special protective equipment : Wear full protective clothing and self-contained breathing apparatus.

Further information : Prevent fire extinguishing water from contaminating surface water or the ground

> water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

: (on small fires) If area is heavily exposed to fire and if conditions permit, let fire

burn itself out since water may increase the area contaminated. Cool

containers/tanks with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Control access to area. Evacuate personnel to safe areas. Keep people away

> from and upwind of spill/leak. Ventilate spill area. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Refer to protective measures listed in sections 7

and 8.

6.2. Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so. Use appropriate container to

avoid environmental contamination. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Clean-up methods - small spillage Soak up with inert absorbent material.

> Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean-up methods - large spillage Prevent further leakage or spillage. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Large spills should be collected mechanically (remove by pumping) for disposal. Collect leaking liquid in sealable (metal/plastic) containers. Collect and contain contaminated

absorbent and dike material for disposal.

Other information : Never return spills in original containers for re-use. Dispose of in accordance

with local regulations.

6.4. Reference to other sections

For personal protection see section 8., For disposal instructions see section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Use only according to our recommendations. Wear personal protective

equipment. Wash the outside of gloves before removing. For personal protection see section 8. Use only clean equipment. Provide adequate ventilation. Do not breathe vapours or spray mist. When opening containers, avoid breathing vapours that may be emanating. Prepare the working solution as given on the label(s) and/or the user instructions. Use prepared working solution as soon as possible - Do not store. To avoid spills during handling keep bottle on a metal tray. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Never return unused material to storage receptacle. Avoid exceeding the given

occupational exposure limits (see section 8).

Advice on protection against fire and explosion

Keep away from heat and sources of ignition. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Store in a place accessible by authorized persons only. Store in original container. Keep in properly labelled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep

away from food, drink and animal feedingstuffs.

Advice on common storage : No special restrictions on storage with other products.

Other data : Stable under recommended storage conditions.

7.3. Specific end use(s)

Plant protection products subject to Regulation (EC) No 1107/2009.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

If sub-section is empty then no values are applicable.

8.2. Exposure controls

Engineering measures : Ensure adequate ventilation, especially in confined areas.

Contains no substances with occupational exposure limit values.

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection : Material: Nitrile rubber

Glove thickness: 0,3 mm

Glove length: Standard glove type.

Protection index: Class 6

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Wearing time: 8 h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Gloves must be inspected prior to use. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Gauntlets shorter than 35 cm long shall be worn under the combination sleeve. Before removing gloves clean them with soap and water.

Skin and body protection : Manufacturing and processing work: Full protective clothing Type 6 (EN 13034)

Mixer and loaders must wear: Full protective clothing Type 6 (EN 13034) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).

Field and greenhouse application: Drip irrigation: No personal body protection normally required. Full protective clothing Type 4 (EN 14605) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).

Protective measures : Only protected handlers may be in the area during application. The type of

protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Regular

cleaning of equipment, work area and clothing. Keep working clothes separately. Contaminated work clothing should not be allowed out of the workplace. Separate rooms are required for washing, showering and changing clothes. Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Remove clothing/PPE immediately if material gets inside. For environmental protection remove and wash all contaminated protective equipment before re-use. Dispose of rinse water in accordance with local and

national regulations.

Respiratory protection : Manufacturing and processing work: Half mask with vapour filter A1 (EN 141)

Mixer and loaders must wear: Half mask with vapour filter A1 (EN 141)

Field and greenhouse application: Drip irrigation: No personal respiratory protective equipment normally required. In case of mist or aerosol exposure wear suitable personal respiratory protection. Half mask with a particle filter

FFP1 (EN149)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form : liquid

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Colour : off-white

Odour : odourless

Odour Threshold : not determined

pH : 7,3 at 10 g/l

Boiling point/boiling range : Not available for this mixture.

Flash point : > 98 $^{\circ}$ C

Thermal decomposition : Not available for this mixture.

Auto-ignition temperature :>800~ °C , Test Type :Auto-ignition temperature

Oxidizing properties : The product is not oxidizing.

Explosive properties : Not explosive

Lower explosion limit/ lower

flammability limit

: Not available for this mixture.

Upper explosion limit/ upper

flammability limit

: Not available for this mixture.

Vapour pressure : Not available for this mixture.

Density : 1,07 g/cm3 at 20 ℃

Relative density : 1,068 at 20 ℃

Water solubility : dispersible

Partition coefficient: n-

octanol/water

: Not applicable

Viscosity, dynamic : 474,3 mPa.s , 50 rpm

Evaporation rate : Not available for this mixture.

9.2. Other information

Phys.-chem./other information : No other data to be specially mentioned.

SECTION 10: Stability and reactivity

10.1. Reactivity : No dangerous reaction known under conditions of normal use.

10.2. Chemical stability : The product is chemically stable under recommended conditions of storage, use

and temperature.

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10.3. Possibility of : No dangerous reaction known under conditions of normal use. Polymerization

hazardous reactions will not occur. No decomposition if stored and applied as directed.

10.4. Conditions to avoid : Protect from frost.

10.5. Incompatible materials : No materials to be especially mentioned.

10.6. Hazardous : No materials to be especially mentioned.

decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

LD50 / Rat : > 5 000 mg/kg

Method: OECD Test Guideline 425

(Data on the product itself) Information source: Internal study report

Acute inhalation toxicity

LC50 / 4 h Rat: > 3,7 mg/l

Method: OECD Test Guideline 403

(Data on the product itself) Information source: Internal study report

Acute dermal toxicity

LD50 / Rat : > 5 000 mg/kg

Method: OECD Test Guideline 402

(Data on the product itself) Information source: Internal study report

Skin irritation

Rabbit

Result: No skin irritation

Method: OECD Test Guideline 404

(Data on the product itself) Information source: Internal study report

Eye irritation

Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

(Data on the product itself) Information source: Internal study report

Sensitisation

Mouse Local lymph node test

Result: Animal test did not cause sensitization by skin contact.

Method: OECD Test Guideline 429

(Data on the product itself) Information source: Internal study report

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Repeated dose toxicity

Cyantraniliprole

The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Oral Rat

Exposure time: 28 - 90 d

Thyroid effects, Organ weight changes, No effect to neurotoxicity.

Oral Dog

Exposure time: 28 d

Liver effects, altered blood chemistry

Mutagenicity assessment

Cyantraniliprole

Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Evidence suggests this substance does not cause genetic damage in animals.

Carcinogenicity assessment

Cyantraniliprole

Not classifiable as a human carcinogen. Animal testing did not show any carcinogenic effects.

Toxicity to reproduction assessment

• Cyantraniliprole

No toxicity to reproduction Animal testing showed no reproductive toxicity.

Assessment teratogenicity

Cyantraniliprole

Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

STOT - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

The mixture does not have properties associated with aspiration hazard potential.

SECTION 12: Ecological information

12.1. Toxicity

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Toxicity to fish

static test / LC50 / 96 h / Lepomis macrochirus (Bluegill sunfish): > 99 mg/l

Method: OECD Test Guideline 203

(Data on the product itself) Information source: Internal study report

Toxicity to aquatic plants

ErC50 / 72 h / Pseudokirchneriella subcapitata (green algae): > 66,3 mg/l

Method: OECD Test Guideline 201

(Data on the product itself) Information source: Internal study report

Toxicity to aquatic invertebrates

static test / EC50 / 48 h / Daphnia magna (Water flea): 0,0421 mg/l

Method: OECD Test Guideline 202

(Data on the product itself) Information source: Internal study report

Toxicity to soil dwelling organisms

LC50 / 14 d / Eisenia fetida (earthworms): > 1 000 mg/kg

Method: OECD Test Guideline 207

(Data on the product itself) Information source: Internal study report

Toxicity to other organisms

LD50 / 96 h / Apis mellifera (bees): 0,00218 mg/kg

Method: OECD Test Guideline 213

Oral (Data on the product itself) Information source: Internal study report

LD50 / 96 h / Apis mellifera (bees): 0,00355 mg/kg

Method: OECD Test Guideline 213

Contact (Data on the product itself) Information source: Internal study report

Chronic toxicity to fish

Cyantraniliprole

Early Life-Stage / NOEC / 28 d / Cyprinodon variegatus (sheepshead minnow): 2,9 mg/l

Method: US EPA Test Guideline OPPTS 850.1400

Information source: Internal study report

Chronic toxicity to aquatic Invertebrates

Cyantraniliprole

Static-Renewal / NOEC / 21 d / Daphnia magna (Water flea): 0,00656 mg/l

Method: OECD Test Guideline 211 Information source: Internal study report

12.2. Persistence and degradability

Biodegradability

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Not readily biodegradable. Estimation based on data obtained on active ingredient.

12.3. Bioaccumulative potential

Bioaccumulation

Does not bioaccumulate. Estimation based on data obtained on active ingredient.

12.4. Mobility in soil

Mobility in soil

The product is not expected to be mobile in soils.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). / This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.6. Other adverse effects

Additional ecological information

No other ecological effects to be specially mentioned See product label for additional application instructions relating to environmental precautions.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product : In accordance with local and national regulations. Must be incinerated in a

suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate ponds, waterways or ditches with chemical or

used container.

Contaminated packaging : Do not re-use empty containers.

European Waste Catalogue

number

: 020108: agrochemical waste containing dangerous substances

SECTION 14: Transport information

ADR

14.1. UN number: 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Cyantraniliprole)

14.3. Transport hazard class(es): 9
14.4. Packing group: III

14.5. Environmental hazards: Environmentally hazardous

14.6. Special precautions for user:

Tunnel restriction code: (E)

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14.1. UN number: 3082

14.2. UN proper shipping name: Environmentally hazardous substance, liquid, n.o.s.

(Cyantraniliprole)

14.3. Transport hazard class(es): 9
14.4. Packing group: III

14.5. Environmental hazards: For further information see Section 12.

14.6. Special precautions for user:

DuPont internal recommendations and transport guidance: ICAO / IATA cargo aircraft only

IMDG

14.1. UN number: 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Cyantraniliprole)

14.3. Transport hazard class(es): 9
14.4. Packing group: III

14.5. Environmental hazards : Marine pollutant

14.6. Special precautions for user:

no data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Other regulations

: The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008. Take note of Dir 94/33/EC on the protection of young people at work. Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers. Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work. Take note of Directive 96/82/EC on the control of major-accident hazards involving

dangerous substances. Take note of Directive 2000/39/EC establishing a first list

of indicative occupational exposure limit values.

15.2. Chemical Safety Assessment

A Chemical Safety Assessment is not required for this/these products

The mixture is registered as a plant protection product under Regulation (EC) No. 1107/2009.

Refer to the label for exposure assessment information.

SECTION 16: Other information

Text of R-phrases mentioned in Section 3

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

Full text of H-Statements referred to under section 3.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Other information professional use

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Abbreviations and acronyms

ADR European Agreement concerning the International Carriage of Dangerous Goods by

Road

ATE Acute toxicity estimate

CAS-No. Chemical Abstracts Service number CLP Classification, Labelling and Packaging

EbC50 Concentration at which 50% reduction of biomass is observed

EC50 Median effective concentration

EN European Norm

EPA Environmental Protection Agency

ErC50 Concentration at which a 50% inhibition of growth rate is observed

EyC50 Concentration at which 50 % inhibition of yield is observed

IATA_C International Air Transport Association (Cargo)

IBC International Bulk Chemical Code
ICAO International Civil Aviation Organization
ISO International Standard Organization
IMDG International Maritime Dangerous Goods

LC50 Median Lethal Concentration

LD50 Median Lethal Dose

LOEC Lowest Observed Effect Concentration

LOEL Lowest observed effect level

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.o.s. Not Otherwise Specified

NOAEC No Observed Adverse Effect Concentration

NOAEL No observed adverse effect level NOEC No Observed Effect Concentration

NOEL No Observed Effect Level

OECD Organisation for Economic Co-operation and Development OPPTS Office of Prevention, Pesticides and Toxic Substances

PBT Persistent, Bioaccumulative and Toxic

STEL Short term exposure limit
TWA Time Weighted Average (TWA):

vPvB very Persistent and very Bioaccumulative

Further information

Before use read DuPont's safety information., Take notice of the directions of use on the label.

Registered trademark of E.I. du Pont de Nemours and Company

Significant change from previous version is denoted with a double bar.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.

SAFETY DATA SHEET according to Regulation (EC) No 1907/2006 and 453/2010



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