

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Page: 1/15

Version: 7.0

(30472208/SDS_CPA_US/EN)

1. Identification

Product identifier used on the label

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Recommended use of the chemical and restriction on use

Recommended use*: insecticide

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Substance number: 395969
EPA Registration number: 499-367
Chemical family: organophosphates
Synonyms: Chlorpyrifos

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Acute Tox.	4 (oral)	Acute toxicity
Resp. Sens.	1	Respiratory sensitization
Skin Sens.	1	Skin sensitization
Aquatic Acute	1	Hazardous to the aquatic environment - acute

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Page: 2/15

Version: 7.0

(30472208/SDS_CPA_US/EN)

Aquatic Chronic

1

Hazardous to the aquatic environment - chronic

Label elements

Pictogram:



Signal Word:

Danger

Hazard Statement:

- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.
P260 Do not breathe dust/gas/mist/vapours.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P284 In case of inadequate ventilation wear respiratory protection.
P272 Contaminated work clothing should not be allowed out of the workplace.
P270 Do not eat, drink or smoke when using this product.
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P314 Get medical advice/attention if you feel unwell.
P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor/physician.
P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P391 Collect spillage.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

- P405 Store locked up.

Precautionary Statements (Disposal):

- P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

Labeling of special preparations (GHS):

Product contains the following components and may cause allergy or asthma symptoms or breathing difficulties if inhaled: 1,2-Ethanediamine

Product contains the following components and may cause an allergic skin reaction: 3,6-diazaoctanethylenediamin; triethylenetetramine, 1,2-Ethanediamine

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Page: 3/15

Version: 7.0

(30472208/SDS_CPA_US/EN)

CONTAINS ISOCYANATES. INHALATION OF ISOCYANATE MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHLESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING. ANIMAL TESTS INDICATE THAT SKIN CONTACT MAY PLAY A ROLE IN CAUSING RESPIRATORY SENSITIZATION.

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Emergency overview

CAUTION:

KEEP OUT OF REACH OF CHILDREN.

KEEP OUT OF REACH OF DOMESTIC ANIMALS.

HARMFUL IF SWALLOWED.

HARMFUL IF INHALED.

HARMFUL IF ABSORBED THROUGH SKIN.

Do not breathe vapours/mists.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
2921-88-2	20.0 %	chlorpyrifos
106-65-0	1.0 - 3.0%	Butanedioic acid, dimethyl ester
107-15-3	0.1 - 1.0%	ethylenediamine
112-24-3	0.1 - 1.0%	triethylenetetramine
627-93-0	0.3 - 3.0%	Hexanedioic acid, dimethyl ester
1119-40-0	3.0 - 7.0%	Pentanedioic acid, dimethyl ester
9016-87-9	1.0 - 5.0%	P-MDI

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
2921-88-2	20.0 %	chlorpyrifos
	80.0 %	Proprietary ingredients

4. First-Aid Measures

Description of first aid measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Version: 7.0

Page: 4/15

(30472208/SDS_CPA_US/EN)

If on skin:

Immediately wash thoroughly with soap and water, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: inhibition of cholinesterase

weakness, muscular spasms, twitching, headache, tightness in the chest, difficulty breathing, shortness of breath, chest discomfort, disturbance of vision, nonreactive pinpoint pupils, salivation, nausea, vomiting, diarrhea, abdominal cramps, urination, perspiration

Hazards: Risk of decrease in cholinesterase activity. If poisoning is probable, treat the patient immediately. Treatment should be given simultaneously with decontamination procedures in severe cases. Proceed concurrently with decontamination using proper protective gear; for example, chemical resistant gloves (neoprene or nitrile) rather than cotton or leather gloves.

Indication of any immediate medical attention and special treatment needed

Note to physician

Antidote:

Administer atropine. Pralidoxime chloride (2-PAM) is antidotal when administered early, and in conjunction with antidote.

Treatment:

Pralidoxime chloride (2-PAM, PROTOPAM chloride) may be effective as an adjunct to atropine. Use according to label directions. Before administering pralidoxime chloride, obtain a blood sample for cholinesterase analysis. Adjusting for age and weight, pralidoxime may be administered as a continuous infusion after a loading dose or using a bolus method. Clear airway and provide oxygen before administering atropine. Tissue oxygenation should be improved as much as possible before administering atropine, so as to minimize the risk of arrhythmia. Give atropine intravenously (IV), or if not immediately possible IV, through an alternative route such as an endotracheal tube or intramuscularly (IM). Give atropine intramuscularly or intravenously, depending on severity of poisoning. Atropine may be administered through an alternative route such as an endotracheal tube. Avoid opiates, parasympathomimetic agents (e.g. succinylcholine), theophylline, reserpine and or phenothiazines. The dosage for atropine is as follows: 1 to 2 mg/kg initially IV in adults (or 0.05 mg/kg in children under 12 years) then give appropriate doses every 15 minutes until excessive secretions and sweating have been controlled. Use soap (preferably Tincture Green Soap) and water or dilute hypochlorite solution for decontaminating skin. Suction oral secretions and emesis to avoid aspiration. Artificial respiration or oxygen administration may be necessary. Observe patient continuously for at least 72 hours. Allow no further exposure to any cholinesterase inhibitor until cholinesterase regeneration has taken place as determined by blood tests.

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Version: 7.0

Page: 5/15

(30472208/SDS_CPA_US/EN)

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

foam, dry powder, carbon dioxide, water spray

Unsuitable extinguishing media for safety reasons:

water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, Sulphur dioxide, Hydrogen chloride, 2-(ethylthio)ethanol, sulfur oxides, Phosphorus compounds, mercaptans, toxic gases/vapours

If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire. Vapours may form explosive mixture with air.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water. A spill of or in excess of the reportable quantity requires notification to state, local and national emergency authorities. This product is regulated by CERCLA ('Superfund').

Methods and material for containment and cleaning up

Dike spillage. Pick up with suitable absorbent material. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Precautions for safe handling

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Page: 6/15

Version: 7.0

(30472208/SDS_CPA_US/EN)

tightly sealed. Protect against heat. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Provide means for controlling leaks and spills. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme heat. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Vapours may form ignitable mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Conditions for safe storage, including any incompatibilities

Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Storage stability:

Storage temperature: 100 °F

Do not store above indicated temperature for extended periods.

If substance/product crystallizes, thaw at room temperature.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with occupational exposure limits

ethylenediamine	OSHA PEL	PEL 10 ppm 25 mg/m3 ; TWA value 10 ppm 25 mg/m3 ;
	ACGIH TLV	Skin Designation ; The substance can be absorbed through the skin. TWA value 10 ppm ;
chlorpyrifos	OSHA PEL	SKIN_FINAL ; The substance can be absorbed through the skin. TWA value 0.2 mg/m3 ;
	ACGIH TLV	Skin Designation Inhalable fraction and vapor ; The substance can be absorbed through the skin. TWA value 0.1 mg/m3 Inhalable fraction and vapor ;
1,2-Ethanediamine	OSHA PEL	PEL 10 ppm 25 mg/m3 ; TWA value 10 ppm 25 mg/m3 ;
	ACGIH TLV	Skin Designation ; The substance can be absorbed through the skin. TWA value 10 ppm ;

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Version: 7.0

Page: 7/15

(30472208/SDS_CPA_US/EN)

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form:	suspension
Odour:	faint odour, characteristic
Odour threshold:	Not determined due to respiratory tract sensitizing properties.
Colour:	yellow opaque
pH value:	approx. 7.5 - 8.5 (approx. 21 °C) (as such)
Freezing point:	approx. 32 °F
Boiling point:	approx. 212 °F
Flash point:	No flash point - Measurement made up to the boiling point.
Flammability:	not applicable

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Version: 7.0

Page: 8/15

(30472208/SDS_CPA_US/EN)

Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Vapour pressure:	approx. 23 hPa (20 °C) Information applies to the solvent.
Density:	approx. 0.96 g/cm3 (20 °C)
Vapour density:	not applicable
Partitioning coefficient n-octanol/water (log Pow):	not applicable
Self-ignition temperature:	not applicable
Thermal decomposition:	carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, Sulphur dioxide, ethanethiol, hydrogen sulphide, 2-(ethylthio)ethanol Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.
Viscosity, dynamic:	1,400 mPa.s (N-114; Viskosität nach Brookfield)
Solubility in water:	dispersible
Evaporation rate:	not applicable
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is chemically stable.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures.

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Version: 7.0

Page: 9/15

(30472208/SDS_CPA_US/EN)

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, Sulphur dioxide, ethanethiol, hydrogen sulphide, 2-(ethylthio)ethanol, Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition:

Possible thermal decomposition products:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, Sulphur dioxide, ethanethiol, hydrogen sulphide, 2-(ethylthio)ethanol

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Relatively nontoxic after single ingestion. Slightly toxic after short-term skin contact.

Oral

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg

Inhalation

No data available concerning acute toxicity.

Dermal

Type of value: LD50

Species: rabbit

Value: > 2,000 mg/kg

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Assessment other acute effects

Assessment of STOT single:

The available information is not sufficient for the evaluation of specific target organ toxicity.

Irritation / corrosion

Assessment of irritating effects: May cause slight but temporary irritation to the eyes. May cause slight irritation to the skin.

Skin

Species: rabbit

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Page: 10/15

Version: 7.0

(30472208/SDS_CPA_US/EN)

Result: non-irritant

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Eye

Species: rabbit

Result: Slightly irritating.

Sensitization

Assessment of sensitization: There is no evidence of a skin-sensitizing potential.

The substance may cause sensitization of the respiratory tract. The product has not been tested.

The statement has been derived from the properties of the individual components.

modified Buehler test

Species: guinea pig

Result: Skin sensitizing effects were not observed in animal studies.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: triethylenetetramine

Assessment of repeated dose toxicity: Repeated oral exposure to large quantities may affect certain organs. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Information on: Methylenediphenyl diisocyanate

Assessment of repeated dose toxicity: The substance may cause damage to the olfactory epithelium after repeated inhalation. The substance may cause damage to the lung after repeated inhalation. These effects are not relevant to humans at occupational levels of exposure.

Information on: Butanedioic acid, dimethyl ester

Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation. The substance may cause damage to the olfactory epithelium after repeated inhalation.

Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: chlorpyrifos

Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria, microorganisms and mammalian cell culture.

Information on: P-MDI

Assessment of mutagenicity: The substance was mutagenic in various test systems with microorganisms and cell cultures; however, these results could not be confirmed in tests with mammals.

Information on: triethylenetetramine

Assessment of mutagenicity: The substance was mutagenic in various test systems with bacterias and cell cultures; however, these results could not be confirmed in tests with mammals.

Information on: Pentanedioic acid, dimethyl ester

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Page: 11/15

Version: 7.0

(30472208/SDS_CPA_US/EN)

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was mutagenic in a mammalian cell culture test system. The substance was not mutagenic in studies with mammals. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: chlorpyrifos

Assessment of carcinogenicity: Not carcinogenic.

Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: chlorpyrifos

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Other Information

Misuse can be harmful to health.

Symptoms of Exposure

inhibition of cholinesterase
weakness, muscular spasms, twitching, headache, tightness in the chest, difficulty breathing, shortness of breath, chest discomfort, disturbance of vision, nonreactive pinpoint pupils, salivation, nausea, vomiting, diarrhea, abdominal cramps, urination, perspiration

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

Information on: chlorpyrifos

*LC50 (96 h) 7.1 ppb, *Oncorhynchus mykiss**

*LC50 (96 h) 1.8 - 2.4 ppb, *Lepomis macrochirus**

*LC50 (96 h) 280 ppb, *Ictalurus punctatus*, syn: *I. robustus**

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Version: 7.0

Page: 12/15

(30472208/SDS_CPA_US/EN)

Toxicity to fish

Information on: Chlorpyrifos

LC50 (96 h) 3 µg/l, Oncorhynchus mykiss

No observed effect concentration (21 d) 1,7 µg /l, Oncorhynchus mykiss

Aquatic invertebrates

Information on: chlorpyrifos

EC50 (48 h) 0.1 ppb, Daphnia magna

Aquatic invertebrates

Information on: Chlorpyrifos

EC50 (48 h) 0.0001 mg/l, Daphnia magna

Aquatic plants

Information on: chlorpyrifos

EC50 0.48 mg/l, Desmodemus subspicatus

Aquatic plants

Information on: Chlorpyrifos

EC50 (96 h) 0.0012 mg/l, Skeletonema costatum

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Information on: Chlorpyrifos

Not readily biodegradable (by OECD criteria).

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment bioaccumulation potential

Information on: Chlorpyrifos

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.

Mobility in soil

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Page: 13/15

Version: 7.0

(30472208/SDS_CPA_US/EN)

Assessment transport between environmental compartments

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Chlorpyrifos

Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Pesticide wastes are regulated. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:

Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Land transport

USDOT

Hazard class:	9
Packing group:	III
ID number:	UN 3082
Hazard label:	9, EHSM
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains CHLORPYRIFOS)

Sea transport

IMDG

Hazard class:	9
Packing group:	III
ID number:	UN 3082
Hazard label:	9, EHSM
Marine pollutant:	YES
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains CHLORPYRIFOS)

Air transport

IATA/ICAO

Hazard class:	9
---------------	---

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Page: 14/15

Version: 7.0

(30472208/SDS_CPA_US/EN)

Packing group: III
ID number: UN 3082
Hazard label: 9, EHSM
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains CHLORPYRIFOS)

Further information

DOT: This product is regulated if the amount in a single receptacle exceeds the Reportable Quantity (RQ). Please refer to Section 15 of this MSDS for the RQ for this product.

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US blocked / not listed

Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Acute; Chronic

EPCRA 313:

CAS Number

101-68-8

9016-87-9

Chemical name

Diphenylmethane-4,4'-diisocyanate (MDI)

P-MDI

CERCLA RQ

5000 LBS

1 LBS

CAS Number

101-68-8; 9016-87-9

2921-88-2

Chemical name

Diphenylmethane-4,4'-diisocyanate (MDI); P-MDI

chlorpyrifos

State regulations

State RTK

PA

MA

NJ

CAS Number

2921-88-2

2921-88-2

2921-88-2

Chemical name

chlorpyrifos

chlorpyrifos

chlorpyrifos

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

Labeling requirements under FIFRA

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 workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION:

KEEP OUT OF REACH OF CHILDREN.

KEEP OUT OF REACH OF DOMESTIC ANIMALS.

HARMFUL IF SWALLOWED.

Safety Data Sheet

DURAGUARD ME MICROENCAPSULATED INSECTICIDE

Revision date : 2016/11/18

Version: 7.0

Page: 15/15

(30472208/SDS_CPA_US/EN)

HARMFUL IF INHALED.

HARMFUL IF ABSORBED THROUGH SKIN.

Do not breathe vapours/mists.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2016/11/18

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
END OF DATA SHEET