Revision Date 19/06/2014
Revision 1
Supersedes date 16/09/2013

SAFETY DATA SHEET
DELTAMOST SUPER EC

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	DELTAMOST SUPER EC
Product No.	DELPBO0135ECB

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

Identified uses	Biocidal products (e.g. disinfectants, pest control).

1.3. Details of the supplier of the safety data sheet

Supplier

Hockley International Ltd
Hockley House
3 Longstone Road
Ashbrook Office Park
Manchester
M22 5LB
TEL: +44 (0) 161 209 7400
FAX: +44 (0) 161 209 7401
sds@hockley.co.uk

1.4. Emergency telephone number

+44 (0) 161 209 7400 9am - 5pm GMT

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Eye Dam. 1 - H318
Environment	Aquatic Acute 1 - H400;Aquatic Chronic 1 - H410

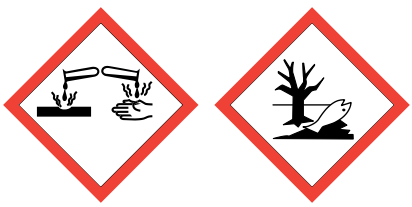
Classification (1999/45/EEC) Xi;R36. N;R50/53.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Contains BENZENE SULPHONIC ACID, 4-C10-14-ALKYL DERIVATIVES, CALCIUM SALTS

Label In Accordance With (EC) No. 1272/2008



Signal Word Danger

Hazard Statements

H318	Causes serious eye damage.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P261	Avoid breathing vapour/spray.

P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local regulations.

Supplementary Precautionary Statements

P273	Avoid release to the environment.
P391	Collect spillage.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

2-(2-BUTOXYETHOXY)ETHANOL — 60-100%

CAS-No.: 112-34-5 | EC No.: 203-961-6 | Registration Number: 01-2119475104-44-XXXX

Classification (EC 1272/2008)	Classification (67/548/EEC)
Eye Irrit. 2 - H319	Xi;R36

PIPERONYL BUTOXIDE — 11% w/v min.

CAS-No.: 51-03-6 | EC No.: 200-076-7

Classification (EC 1272/2008)	Classification (67/548/EEC)
Aquatic Acute 1 - H400	N;R50/53.
Aquatic Chronic 1 - H410	

BENZENE SULPHONIC ACID, 4-C10-14-ALKYL DERIVATIVES, CALCIUM SALTS — 1-5%

CAS-No.: 90194-26-6 | EC No.: 290-635-1

Classification (EC 1272/2008)	Classification (67/548/EEC)
Skin Irrit. 2 - H315	Xi;R38,R41.
Eye Dam. 1 - H318	

DELTAMETHRIN (ISO) — 2.5% w/v min.

CAS-No.: 52918-63-5 | EC No.: 258-256-6

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 3 - H301	T;R23/25
Acute Tox. 3 - H331	N;R50/53
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

2-ETHYLHEXAN-1-OL — 1-5%

CAS-No.: 104-76-7 | EC No.: 203-234-3

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335	Xn;R20. Xi;R36/37/38.

2,6-DI-TERT-BUTYL-P-CRESOL < 1%

CAS-No.: 128-37-0 EC No.: 204-881-4 Registration Number: 01-2119480433-40-XXXX

Classification (EC 1272/2008)	Classification (67/548/EEC)
Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	N;R50/53.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Remove affected person from source of contamination. CAUTION! First aid personnel must be aware of own risk during rescue! Place unconscious person on the side in the recovery position and ensure breathing can take place.

Inhalation

Move the exposed person to fresh air at once. Get medical attention. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration.

Ingestion

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Get medical attention immediately! If breathing stops, provide artificial respiration.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

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

Inhalation

Burning sensation. Coughing. Dizziness. Headache. Nausea, vomiting.

Ingestion

Abdominal cramps. Convulsions. Nausea, vomiting. Unconsciousness. (Further see inhalation).

Skin contact

Redness. Burning sensation. Numbness. Tingling. Itching.

Eye contact

Redness. Pain.

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

Treat symptomatically. Treat seizures with benzodiazepines.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Toxic gases/vapours/fumes of: Hydrogen bromide (HBr). Oxides of: Nitrogen. Carbon.

Specific hazards

Dike and collect extinguishing water. Avoid releasing to the environment. Do not discharge into drains, water courses or onto the ground.

5.3. Advice for firefighters

Special Fire Fighting Procedures

In case of fire and/or explosion do not breathe fumes

Protective equipment for fire-fighters

Self-contained breathing apparatus. Wear full protective clothing. (EN 469)

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Warn everybody of potential hazards and evacuate if necessary.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Stop leak if possible without risk.

6.3. Methods and material for containment and cleaning up

Absorb with sand or other inert absorbent. Dike far ahead of larger spills for later disposal. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. This material and its container must be disposed of as hazardous waste.

6.4. Reference to other sections

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

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handle and open container with care. Wear protective clothing as described in Section 8 of this safety data sheet. Do not release into the environment. Do not allow to enter drains, sewers or watercourses. Do not eat, drink or smoke when using the product. Wash hands after handling. Remove contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials listed in section 10 of this safety data sheet. Keep out of reach of children.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
2-(2-BUTOXYETHOXY)ETHANOL	WEL	10 ppm	67,5 mg/m3	15 ppm	101,2 mg/m3	
2,6-DI-TERT-BUTYL-P-CRESOL	WEL		10 mg/m3			

WEL = Workplace Exposure Limit.

DELTAMOST SUPER EC

2-(2-BUTOXYETHOXY)ETHANOL (CAS: 112-34-5)

DNEL				
Industry	Inhalation.	Short Term	Local Effects	101.2 mg/m3
Industry	Dermal	Long Term	Systemic Effects	20 mg/kg bw/day
Industry	Inhalation.	Long Term	Systemic Effects	67.5 mg/m3
Industry	Inhalation.	Long Term	Local Effects	67.5 mg/m3
Consumer	Inhalation.	Short Term	Local Effects	50.6 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	10 mg/kg bw/day
Consumer	Inhalation.	Long Term	Systemic Effects	34 mg/m3
Consumer	Oral	Long Term	Systemic Effects	1.25 mg/kg bw/day
Consumer	Inhalation.	Long Term	Local Effects	34 mg/m3

PNEC		
Freshwater	1	mg/l
Marinewater	0.1	mg/l
Intermittent release	3.9	mg/l
STP	200	mg/l
Sediment (Freshwater)	4	mg/kg sediment dw
Soil	0.4	mg/kg soil dw
Oral	56	mg/kg food

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

DNEL				
Industry	Inhalation.	Short Term	Systemic Effects	2 mg/m3
Consumer	Oral	Long Term	Systemic Effects	0.3 mg/kg/day

PNEC		
Freshwater	0.0041	mg/l
Marinewater	0.0041	mg/l
Sediment (Freshwater)	0.731	mg/kg
Sediment (Marinewater)	0.731	mg/kg
Soil	0.35	mg/kg

PIPERONYL BUTOXIDE (CAS: 51-03-6)

DNEL				
Industry	Dermal	Short Term	Systemic Effects	55.556 mg/kg/day
Industry	Inhalation.	Short Term	Systemic Effects	7.75 mg/m3
Industry	Dermal	Short Term	Local Effects	444 µg/cm2
Industry	Inhalation.	Short Term	Local Effects	3.875 mg/m3
Industry	Dermal	Long Term	Systemic Effects	27.778 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	3.875 mg/m3
Industry	Dermal	Long Term	Local Effects	444 µg/cm2
Industry	Inhalation.	Long Term	Local Effects	0.222 mg/m3

PNEC		
Freshwater	0.003	mg/l
Marinewater	0.0003	mg/l
Intermittent release	0.0003	mg/l
STP	10	mg/l
Sediment (Freshwater)	0.0194	mg/kg
Sediment (Marinewater)	0.00194	mg/kg
Soil	0.136	mg/kg
Oral	12.53	mg/kg food

8.2. Exposure controls

Engineering measures

Provide adequate ventilation.

Respiratory equipment

It is recommended to use respiratory equipment with combination filter, type A2/P2. If ventilation is insufficient, suitable respiratory protection must be provided. (EN 140/143)

Hand protection

Wear protective gloves. (EN 374)

Eye protection

Avoid contact with eyes. Wear approved safety goggles. (EN 166)

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

Environmental Exposure Controls

Do not release into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Yellow. to Amber.

Initial boiling point and boiling range (°C)
Not available.
Melting point (°C)
Not available.

Relative density	ca. 0.978

Vapour density (air=1)
Not available.
Vapour pressure
Not available.
Evaporation rate
Not available.
Viscosity
Not available.
Solubility Value (G/100G H2O@20°C)
Not available.
Decomposition temperature (°C)
Not available.
Odour Threshold, Lower
Not available.
Odour Threshold, Upper
Not available.

Flash point (°C)	> 62°C ISO 3679

Auto Ignition Temperature (°C)
Not available.
Flammability Limit - Lower(%)
Not available.
Flammability Limit - Upper(%)
Not available.
Partition Coefficient
(N-Octanol/Water)
Not available.
Explosive properties
Not applicable.
Oxidising properties
Not applicable.

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

None known.
Hazardous Polymerisation
Will not polymerise.

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Classification based on Regulation (EC) No 1272/2008.

Acute toxicity:

Acute Toxicity (Oral LD50)

Calculation method.

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

Calculation method.

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

Calculation method.

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Calculation method. Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Calculation method. Causes serious eye damage.

Respiratory or skin sensitisation:

Respiratory sensitisation

Not available.

Skin sensitisation

Calculation method.

Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Calculation method.

Genotoxicity - In Vivo

Calculation method.

Based on available data the classification criteria are not met.

Carcinogenicity:

Calculation method. Based on available data the classification criteria are not met.

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Calculation method.

Reproductive Toxicity - Development

Calculation method.

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

STOT - Single exposure

Not available.

Specific target organ toxicity - repeated exposure:

DELTAMOST SUPER EC

STOT - Repeated exposure

Calculation method.

Based on available data the classification criteria are not met.

Aspiration hazard:

Calculation method. Based on available data the classification criteria are not met.

Toxicological information on ingredients.

DELTAMETHRIN (ISO) (CAS: 52918-63-5)

Acute toxicity:

Acute Toxicity (Oral LD50)

87 mg/kg Rat

Toxic if swallowed.

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rat

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

0.6 mg/l (dust/mist) Rat 6 hours

Toxic if inhaled.

Skin Corrosion/Irritation:

Not Irritating.

Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Not Irritating. Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:

Skin sensitisation

Buehler test:

Not sensitising.

Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Non-genotoxic.

Based on available data the classification criteria are not met.

Carcinogenicity:

This substance has no evidence of carcinogenic properties.

Based on available data the classification criteria are not met.

Reproductive Toxicity:

No reproductive or developmental effects occurred at non-parentally toxic doses.

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

No data available.

Specific target organ toxicity - repeated exposure:

Based on available data the classification criteria are not met.

Aspiration hazard:

Based on available data the classification criteria are not met.

DELTAMOST SUPER EC

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Acute toxicity:
Acute Toxicity (Oral LD50)
2930 mg/kg Rat
REACH dossier information
Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)
> 2000 mg/kg Rat
REACH dossier information
Based on available data the classification criteria are not met.
Acute Toxicity (Inhalation LC50)
Data lacking.

Skin Corrosion/Irritation:
Dose
24 hr Rabbit
Erythema\eschar score
Very slight erythema -barely perceptible (1).
Oedema score
Very slight oedema -barely perceptible (1).
REACH dossier information
Not irritating.

Serious eye damage/irritation:
Not Irritating.

Respiratory or skin sensitisation:
Skin sensitisation
Patch Test: Human
REACH dossier information
Not Sensitising.

Germ cell mutagenicity:
Genotoxicity - In Vitro
Chromosome aberration:
REACH dossier information
Negative.
Based on available data the classification criteria are not met.
Genotoxicity - In Vivo
Chromosome aberration:
REACH dossier information
Negative.
Based on available data the classification criteria are not met.

Carcinogenicity:
This substance has no evidence of carcinogenic properties.

Reproductive Toxicity:
Reproductive Toxicity - Fertility
Two-generation study: NOAEL 500 mg/kg Oral Rat
REACH dossier information
Based on available data the classification criteria are not met.
Reproductive Toxicity - Development
Developmental toxicity: NOAEL 100 mg/kg Oral Rat
REACH dossier information
Based on available data the classification criteria are not met.

DELTAMOST SUPER EC

Specific target organ toxicity - single exposure:

Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

NOAEL 25 mg/kg bw/day Oral Rat

REACH dossier information

Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard:

Based on available data the classification criteria are not met.

DELTAMOST SUPER EC

PIPERONYL BUTOXIDE (CAS: 51-03-6)

Acute toxicity:

Acute Toxicity (Oral LD50)

5360 mg/kg Rat

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rabbit

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

> 5.9 mg/l (dust/mist) Rat 4 hours

REACH dossier information

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Erythema\eschar score

No erythema (0).

Oedema score

No oedema (0).

REACH dossier information

Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Not Irritating. REACH dossier information Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:

Respiratory sensitisation

Data lacking.

Skin sensitisation

Buehler test: Guinea Pig

REACH dossier information

Not Sensitising. Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Chromosome aberration:

REACH dossier information

Negative.

Based on available data the classification criteria are not met.

Genotoxicity - In Vivo

Chromosome aberration:

REACH dossier information

Negative.

Based on available data the classification criteria are not met.

Carcinogenicity:

Carcinogenicity

NOAEL 30 mg/kg/day Oral Rat

REACH dossier information

Based on available data the classification criteria are not met.

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Two-generation study: NOAEL 1000 ppm Oral Rat P

REACH dossier information

Based on available data the classification criteria are not met.

Reproductive Toxicity - Development

Maternal toxicity: NOAEL 200 mg/kg/day Oral Rat

REACH dossier information

No reproductive or developmental effects occurred at non-parentally toxic doses. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

STOT - Single exposure

Data lacking.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

NOAEL 15.5 mg/kg Oral

REACH dossier information

Based on available data the classification criteria are not met.

Aspiration hazard:

Not relevant, due to the form of the product.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Classification based on Regulation (EC) No 1272/2008. Very toxic to aquatic life with long lasting effects.

DELTAMOST SUPER EC

Ecological information on ingredients.

DELTAMETHRIN (ISO) (CAS: 52918-63-5)

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Acute Toxicity - Fish

LC50 96 hours = 0.26 µg/l Onchorhynchus mykiss (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates

LC50 96 hours = 0.0003 µg/l Gammarus fasciatus

Acute Toxicity - Aquatic Plants

ErC50 96 hours > 0.47 mg/l Chlorella vulgaris

Chronic Toxicity - Fish Early life Stage

NOEC 260 days = 0.017 µg/l Pimephales promelas (Fat-head Minnow)

Chronic Toxicity - Aquatic Invertebrates

NOEC 28 days = 0.0035 µg/l Chironomus riparius

NOEC 21 days = 0.0041 µg/l Daphnia magna

Acute Toxicity - Terrestrial

LD50 > 2250 mg/kg Colinus Virginianus (Bobwhite Quail)

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Acute Toxicity - Fish

LC0 96 hours 0.57 mg/l Brachydanio rerio (Zebra Fish)

REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 0.61 mg/l Daphnia magna

REACH dossier information

Acute Toxicity - Aquatic Plants

EC50 72 hours > 0.4 mg/l Scenedesmus subspicatus

REACH dossier information

PIPERONYL BUTOXIDE (CAS: 51-03-6)

Acute Toxicity - Fish

LC50 96 hours = 3.94 mg/l

REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours = 0.51 mg/l Daphnia magna

REACH dossier information

Acute Toxicity - Aquatic Plants

ErC50 72 hours = 3.89 mg/l Selenastrum capricornutum

REACH dossier information

Chronic Toxicity - Fish Early life Stage

NOEC 35 days = 0.18 mg/l Pimephales promelas (Fat-head Minnow)

REACH dossier information

Chronic Toxicity - Aquatic Invertebrates

NOEC 21 days = 0.03 mg/l

REACH dossier information

12.2. Persistence and degradability

Ecological information on ingredients.

DELTAMETHRIN (ISO) (CAS: 52918-63-5)

Degradability

The product is not readily biodegradable.

Phototransformation

Water DT50 > 48 days

Biodegradation

Water and Sediment DT50 79 days

Soil DT50 17 days

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Phototransformation

Air. DT50 ~ 7 hours

REACH dossier information

Stability (Hydrolysis)

Half-life: < 8 days @ 20°C

REACH dossier information

Biodegradation

Water Degradation (4.5%) 28 days

REACH dossier information

No biodegradation observed under test conditions.

PIPERONYL BUTOXIDE (CAS: 51-03-6)

Degradability

The product is not readily biodegradable.

Phototransformation

Air. Degradation (50%) = 3.6 hours

REACH dossier information

Water DT50 = 8.4 hours

REACH dossier information

Stability (Hydrolysis)

pH7 Half-life: > 500 days @ 25°C

REACH dossier information

12.3. Bioaccumulative potential

Partition coefficient

Not available.

Ecological information on ingredients.

DELTAMETHRIN (ISO) (CAS: 52918-63-5)

Bioaccumulation factor

BCF = 1400

Partition coefficient

log Kow = 4.6

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Bioaccumulation factor

BCF > 330 - 1800 Cyprinus carpio (Common carp)

REACH dossier information

PIPERONYL BUTOXIDE (CAS: 51-03-6)

Bioaccumulation factor

BCF = 380 Lepomis macrochirus (Bluegill)

REACH dossier information

Partition coefficient

log Pow = 4.8

REACH dossier information

12.4. Mobility in soil

Ecological information on ingredients.

DELTAMETHRIN (ISO) (CAS: 52918-63-5)

Mobility:

Not considered mobile.

Adsorption/Desorption Coefficient

Soil Koc = 408205

Henry's Law Constant

0.001252 Pa m3/mol 25°C

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Mobility:

The product is partly soluble in water. May spread in the aquatic environment.

Adsorption/Desorption Coefficient

Soil Koc 8183

REACH dossier information

Henry's Law Constant

0.342 Pa m3/mol @ 25°C

REACH dossier information

PIPERONYL BUTOXIDE (CAS: 51-03-6)

Mobility:

Semi-mobile.

Adsorption/Desorption Coefficient

Soil Koc = 830

REACH dossier information

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

Ecological information on ingredients.

DELTAMETHRIN (ISO) (CAS: 52918-63-5)

Not Classified as PBT/vPvB by current EU criteria.

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Not Classified as PBT/vPvB by current EU criteria.

PIPERONYL BUTOXIDE (CAS: 51-03-6)

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

Ecological information on ingredients.

PIPERONYL BUTOXIDE (CAS: 51-03-6)

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Waste is suitable for incineration. Contact specialist disposal companies. Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082

14.2. UN proper shipping name

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name	(contains deltamethrin, piperonyl butoxide)

14.3. Transport hazard class(es)

ADR/RID/ADN Class	9
ADR/RID/ADN Class	Class 9: Miscellaneous dangerous substances and articles.
IMDG Class	9
ICAO Class/Division	9

Transport Labels

14.4. Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Health and Environmental Listings

Regulation EC 2037/2000 on substances that deplete the ozone layer. Regulation EC 689/2008 concerning the export and import of dangerous chemicals. None of the ingredients are listed.

DELTAMOST SUPER EC

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms used in the safety data sheet

PBT - Persistent, bioaccumulative and toxic. vPvB - Very persistent and very bioaccumulative EN - European standard adopted by the European Committee for Standardisation.

Information Sources

International Chemical Safety Card. The International Union of Pure and Applied Chemistry (IUPAC) pesticide properties database - http://sitem.herts.ac.uk/aeru/iupac/index.htm International Program on Chemical Safety (IPCS) Health and Safety Guide. World Health Organisation (WHO)/Food and Agriculture Organisation of the United Nations (FAO) Pesticide Data Sheet. Available from www.inchem.org. Directive 98/8/EC concerning the placing biocidal products on the market. Inclusion of active substances in Annex I or IA to Directive 98/8/EC. Assessment report. Review report for active substances by the Directorate General for Health and Consumer Affairs (DG SANCO) - http://ec.europa.eu/sanco_pesticides/public/index.cfm?event=activesubstance.selection Disseminated REACH registration dossier - http://apps.echa.europa.eu/registered/registered-sub.aspx Supplier safety data sheet (SDS).

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Risk Phrases In Full

R20	Harmful by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R36	Irritating to eyes.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R23/25	Toxic by inhalation and if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H410	Very toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.