

Revision Date 05/04/2013

Revision 1



SAFETY DATA SHEET DELTAMOST 10 SC

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

1.1. Product identifier

Product name DELTAMOST 10 SC
Product No. DELTAM0100SCA

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 (1999/45/EEC) Xn;R20/22. N;R50/53.

2.2. Label elements

Contains DELTAMETHRIN (ISO)

Labelling



Harmful



Dangerous for the environment

Risk Phrases

R20/22
R50/53

Harmful by inhalation and if swallowed.

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

Safety Phrases

S23
S38
S57
S60
S61

Do not breathe vapour/spray.

In case of insufficient ventilation, wear suitable respiratory equipment.

Use appropriate containment to avoid environmental contamination.

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

DELTAMOST 10 SC

DELTAMETHRIN (ISO)		100 g/l min
CAS-No.: 52918-63-5	EC No.: 258-256-6	
Classification (EC 1272/2008) Acute Tox. 3 - H301 Acute Tox. 3 - H331 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC) T;R23/25 N;R50/53	
1,2-PROPANDIOL		5-10%
CAS-No.: 57-55-6	EC No.: 200-338-0	Registration Number: 01-2119456809-23-XXXX
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.	
SILICON DIOXIDE		< 1%
CAS-No.: 7631-86-9	EC No.: 231-545-4	Registration Number: 01-2119379499-19-XXXX
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.	
TITANIUM DIOXIDE		< 1%
CAS-No.: 13463-67-7	EC No.: 236-675-5	Registration Number: 01-2119489379-17-XXXX
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.	

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

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).

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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

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

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 the 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

DELTAMOST 10 SC

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
1,2-PROPANDIOL	WEL	150 ppm	10 mg/m3			
SILICON DIOXIDE	WEL		2.4 mg/m3 resp.dust			
SILICON DIOXIDE	WEL		6 mg/m3 total dust			
TITANIUM DIOXIDE	WEL		4 mg/m3			

WEL = Workplace Exposure Limit.

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

No exposure limits noted for ingredient(s).

1,2-PROPANDIOL (CAS: 57-55-6)DNEL

Industry	Inhalation.	Long Term	Systemic Effects	168 mg/m3
Industry	Inhalation.	Long Term	Local Effects	10 mg/m3
Consumer	Inhalation.	Long Term	Systemic Effects	50 mg/m3
Consumer	Inhalation.	Long Term	Local Effects	10 mg/m3

PNEC

Freshwater	260	mg/l
Marinewater	26	mg/l
Intermittent release	183	mg/l
STP	20000	mg/l
Sediment (Freshwater)	572	mg/kg
Sediment (Marinewater)	57.2	mg/kg
Soil	50	mg/kg

SILICON DIOXIDE (CAS: 7631-86-9)DNEL

Industry	Inhalation.	Long Term	Systemic Effects	4 mg/m3
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TITANIUM DIOXIDE (CAS: 13463-67-7)DNEL

Industry	Inhalation.	Long Term	Systemic Effects	10 mg/m3
Consumer	Oral	Long Term	Systemic Effects	700 mg/kg/day

PNEC

Freshwater	0.127	mg/l
Marinewater	1	mg/l
Intermittent release	0.61	mg/l
STP	100	mg/l
Sediment (Freshwater)	1000	mg/kg
Sediment (Marinewater)	100	mg/kg
Soil	100	mg/kg

8.2. Exposure controlsEngineering measures

Provide adequate ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Use respiratory equipment with particle filter, type P2. (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.

Thermal hazards

No data available.

Environmental Exposure Controls

Do not release into the environment.

DELTAMOST 10 SC

9.1. Information on basic physical and chemical properties

<u>Appearance</u>	Liquid
<u>Colour</u>	White / off-white.
<u>Odour</u>	Slight odour.
<u>Solubility</u>	Disperses.
<u>Initial boiling point and boiling range</u>	
Not available.	
<u>Melting point (°C)</u>	
Not available.	
<u>Relative density</u>	1.035 (1.025 - 1.045) @ 20°C
<u>Vapour density (air=1)</u>	
Not available.	
<u>Vapour pressure</u>	
Not available.	
<u>Evaporation rate</u>	
Not available.	
<u>pH-Value, Conc. Solution</u>	
Not available.	
<u>Viscosity</u>	
Not available.	
<u>Solubility Value (G/100G H₂O@20°C)</u>	
Not available.	
<u>Decomposition temperature (°C)</u>	
Not available.	
<u>Odour Threshold, Lower</u>	
Not available.	
<u>Odour Threshold, Upper</u>	
Not available.	
<u>Flash point</u>	Not available. > 100 °C ISO 3679
<u>Auto Ignition Temperature (°C)</u>	
Not available.	
<u>Flammability Limit - Lower(%)</u>	
Not available.	
<u>Flammability Limit - Upper(%)</u>	
Not available.	
<u>Partition Coefficient (N-Octanol/Water)</u>	
Not relevant	
<u>Explosive properties</u>	
Not available.	
<u>Oxidising properties</u>	
Not available.	

9.2. Other information

No information required.

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

No data available.

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.

DELTAMOST 10 SC

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Classification according to Directive 1999/45/EC.

Acute toxicity:

Acute Toxicity (Oral LD50)

Calculation method.

Harmful if swallowed.

Acute Toxicity (Dermal LD50)

Calculation method.

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

Calculation method.

Harmful by inhalation.

Skin Corrosion/Irritation:

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

Serious eye damage/irritation:

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

Respiratory or skin sensitisation:

Calculation method.

Based on available data the classification criteria are not met.

Germ cell mutagenicity:

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:

Calculation method.

Based on available data the classification criteria are not met.

Toxicological information on ingredients.

DELTAMOST 10 SC
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.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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Ecological information on ingredients.

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

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)

12.2. Persistence and degradability

Degradability

The product contains persistent (not readily degradable) substances.

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

12.3. Bioaccumulative potential

Bioaccumulative potential

The product contains potentially bioaccumulating substances.

Partition coefficient

Not relevant

Ecological information on ingredients.

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

Bioaccumulation factor

BCF = 1400

Partition coefficient

log Kow = 4.6

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

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

DELTAMOST 10 SC

Ecological information on ingredients.

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

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not known.

Ecological information on ingredients.

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

Not known.

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).

14.3. Transport hazard class(es)

ADR/RID/ADN Class 9

ADR Label No. 9

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

DELTAMOST 10 SC

**14.6. Special precautions for user**

EMS	F-A, S-F
Emergency Action Code	•3Z
Hazard No. (ADR)	90
Tunnel Restriction Code	(E)

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 mixtureUk 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.

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

The International Union of Pure and Applied Chemistry (IUPAC) pesticide properties database - <http://sitem.herts.ac.uk/aeru/iupac/index.htm> International Chemical Safety Card. 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).

Revision Date 05/04/2013

Revision 1

Risk Phrases In Full

R20/22	Harmful by inhalation and if swallowed.
NC	Not classified.
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.

DELTAMOST 10 SC

Hazard Statements In Full

H332	Harmful if inhaled.
H302	Harmful if swallowed.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H410	Very toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.