

# SAFETY DATA SHEET MOSTYN DUO CS

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

#### 1.1. Product identifier

Product name MOSTYN DUO CS
Product number CYPPRA1181ZWA

## 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

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

# SECTION 2: Hazards identification

# 2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

Classification (67/548/EEC or N; R50/53

1999/45/EC)

# 2.2. Label elements

#### **Pictogram**



Signal word Warning

**Hazard statements** H410 Very toxic to aquatic life with long lasting effects.

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**Precautionary statements** P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with national regulations.

Supplemental label information

EUH401 To avoid risks to human health and the environment, comply with the instructions for

use.

## 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

#### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

CYPHENOTHRIN 10.71%

Classification

Acute Tox. 4 - H302 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

1,2-PROPANDIOL 5-10%

CAS number: 57-55-6 EC number: 200-338-0 REACH registration number: 01-

2119456809-23-XXXX

Classification Classification (67/548/EEC or 1999/45/EC)

Not Classified -

PRALLETHRIN 1.1%

Classification

Acute Tox. 4 - H302 Acute Tox. 3 - H331 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

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 affected 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.

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**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. 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 Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue

to rinse.

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

**Inhalation** No data available.

**Ingestion** No data available.

Skin contact No data available.

Eye contact No data available.

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

Notes for the doctor Treat symptomatically.

#### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media Water spray, foam, dry powder or carbon dioxide. Use fire-extinguishing media suitable for the

surrounding fire.

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

Specific hazards Contain and collect extinguishing water. Avoid releasing into the environment. Do not

discharge into drains or watercourses or onto the ground.

Hazardous combustion

products

Heating may generate the following products: Carbon dioxide (CO2). Carbon monoxide (CO).

Oxides of nitrogen.

# 5.3. Advice for firefighters

Protective actions during

firefighting

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

Special protective equipment

for firefighters

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

## SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions 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

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground. Stop leak if possible without

risk. In case of entry into waterways, soil or drains, inform the responsible authorities.

#### 6.3. Methods and material for containment and cleaning up

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#### Methods for cleaning up

Absorb spillage with sand or other inert absorbent. Dike far ahead of larger spills for later disposal. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. This material and its container must be disposed of as hazardous waste.

#### 6.4. Reference to other sections

**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

Usage precautions

Handle and open container with care. Wear protective clothing as described in Section 8 of this safety data sheet. Keep container tightly sealed when not in use. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Do not release into the environment. Avoid the spillage or runoff entering 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. Do not breathe vapours.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

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)

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

# Occupational exposure limits

#### 1,2-PROPANDIOL

Long-term exposure limit (8-hour TWA): WEL 150 ppm 474 mg/m³ total vapour and particulates Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

WEL = Workplace Exposure Limit

## 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 - Fresh water; 260 mg/l

- Marine water; 26 mg/l

- Intermittent release; 183 mg/l

- STP; 20000 mg/l

Sediment (Freshwater); 572 mg/kgSediment (Marinewater); 57.2 mg/kg

- Soil; 50 mg/kg

## 8.2. Exposure controls

Appropriate engineering

controls

Provide adequate ventilation.

**Eye/face protection** Avoid contact with eyes. Wear approved safety goggles (EN 166).

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**Hand protection** Wear protective gloves (EN 374).

Other skin and body

protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures No specific hygiene procedures recommended but good personal hygiene practices should

always be observed when working with chemical products.

environment-independant breathing apparatus.

Thermal hazards No data available.

**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 Viscous liquid.

Colour White.

Odour No characteristic odour.

Odour threshold Not available.

pH (diluted solution): 6 - 8 of a 1% solution

Melting point Not available.

Initial boiling point and range  $>35^{\circ}$ C @ Flash point  $>100^{\circ}$ C

**Evaporation rate** Not available.

Upper/lower flammability or

explosive limits

Not available.

Vapour pressureNot available.Vapour densityNot available.Relative density0.8-1.1 g/cm3Solubility(ies)Not available.

Auto-ignition temperature Not available.

**Decomposition Temperature** Not available.

**Viscosity** Kinematic viscosity > 20.5 mm<sup>2</sup>/s.

Explosive properties Not available.

Oxidising properties Not available.

9.2. Other information

Other information Not available.

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

**Reactivity** No data available.

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10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

None known. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition

Does not decompose when used and stored as recommended.

products

#### SECTION 11: Toxicological information

# 11.1. Information on toxicological effects

**Toxicological effects** Classification according to Regulation (EC) No 1272/2008.

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) Based on available data the classification criteria are not met.

**ATE oral (mg/kg)** 4,233.7

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>)

Based on available data the classification criteria are not met.

45.45

ATE inhalation (dusts/mists

mg/l)

Skin corrosion/irritation

**Skin corrosion/irritation** Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

Germ cell mutagenicity

**Genotoxicity - in vivo**Based on available data the classification criteria are not met.

Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

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Based on available data the classification criteria are not met. STOT - single exposure

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Toxicological information on ingredients.

**CYPHENOTHRIN** 

Acute toxicity - oral

Acute toxicity oral (LD₅o

mg/kg)

318.0

**Species** Rat

**OECD 425** Notes (oral LD₅₀)

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> 2,000.0

mg/kg)

**Species** Rat

OECD 402. Notes (dermal LD₅₀)

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Animal data OECD 404. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. OECD 405. Rabbit

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Not sensitising. OECD 429. Guinea pig

Germ cell mutagenicity

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met. Carcinogenicity

Reproductive toxicity

Reproductive toxicity -

Based on available data the classification criteria are not met.

fertility

Reproductive toxicity -Based on available data the classification criteria are not met.

development

Specific target organ toxicity - single exposure

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**STOT - single exposure** Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

**PRALLETHRIN** 

Acute toxicity - oral

Acute toxicity oral (LD₅o

mg/kg)

417.0

Species Rat

Notes (oral LD₅₀) OECD 425

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅o) LD₅o >2000 mg/kg, OECD 402., Rat

Acute toxicity - inhalation

Acute toxicity inhalation

(LC<sub>50</sub> dust/mist mg/l)

0.658

0.5

**Species** Rat

Notes (inhalation LC<sub>50</sub>) OECD 403.

ATE inhalation

(dusts/mists mg/l)

Skin corrosion/irritation

**Skin corrosion/irritation** Not irritating.

Animal data OECD 404. Rabbit

Serious eye damage/irritation

Serious eye

damage/irritation

Not irritating. OECD 405. Rabbit

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

**Skin sensitisation** Not sensitising. OECD 429. Rabbit

Germ cell mutagenicity

**Genotoxicity - in vivo**Based on available data the classification criteria are not met.

Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity -

fertility

Based on available data the classification criteria are not met.

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Reproductive toxicity -

development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

**STOT - single exposure** Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

## SECTION 12: Ecological Information

## 12.1. Toxicity

**Toxicity** Classification according to Regulation (EC) No 1272/2008. Very toxic to aquatic life with long

lasting effects.

## Ecological information on ingredients.

#### **CYPHENOTHRIN**

**Toxicity** Classification according to Regulation (EC) No 1272/2008. Very toxic to aquatic life

with long lasting effects.

Acute aquatic toxicity

**LE(C)**<sub>50</sub>  $0.0001 < L(E)C50 \le 0.001$ 

M factor (Acute) 1000

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 0.00034 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 48 hours: 0.00043 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC<sub>50</sub>, 72 hours: >0.014 mg/l, Algae

Chronic aquatic toxicity

M factor (Chronic)

# PRALLETHRIN

Toxicity Classification according to Regulation (EC) No 1272/2008. Very toxic to aquatic life

with long lasting effects.

Acute aquatic toxicity

**LE(C)**<sub>50</sub>  $0.001 < L(E)C50 \le 0.01$ 

M factor (Acute) 100

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 0.012 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 48 hours: 0.0062 mg/l, Daphnia magna

Chronic aquatic toxicity

**NOEC**  $0.0001 < NOEC \le 0.001$ 

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Degradability Non-rapidly degradable

M factor (Chronic) 100

12.2. Persistence and degradability

Ecological information on ingredients.

**CYPHENOTHRIN** 

Persistence and

degradability

The product is not readily biodegradable.

**PRALLETHRIN** 

Persistence and

degradability

The product is readily biodegradable.

12.3. Bioaccumulative potential

Ecological information on ingredients.

**CYPHENOTHRIN** 

Partition coefficient log Pow: 5.79 - 6.09

**PRALLETHRIN** 

Partition coefficient

log Pow: ~ 49

12.4. Mobility in soil

Ecological information on ingredients.

**CYPHENOTHRIN** 

Mobility No information available.

**PRALLETHRIN** 

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

Ecological information on ingredients.

**CYPHENOTHRIN** 

Results of PBT and vPvB

assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

**PRALLETHRIN** 

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Ecological information on ingredients.

assessment

**CYPHENOTHRIN** 

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Other adverse effects No data available.

#### **PRALLETHRIN**

Other adverse effects No data available.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in

accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste via a licensed waste disposal contractor. Waste is suitable for incineration.

Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling.

## **SECTION 14: Transport information**

General Environmentally Hazardous Substance Mark NOT required for single packagings and

combination packagings containing inner packagings < 5L for liquids, or < 5kg for solids.

(ADR special provision 375, IMDG code 2.10.2.7, IATA special provision A197)

Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provisions of the Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class all provisions of this Code relevant to any additional hazards

continue to apply.

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (ADN) 3082

# 14.2. UN proper shipping name

Proper shipping name

(ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains cyphenothrin &

prallethrin)

Proper shipping name

(IMDG)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains cyphenothrin &

prallethrin)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains cyphenothrin &

prallethrin)

Proper shipping name (ADN)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains cyphenothrin &

prallethrin)

#### 14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID classification code M6

ADR/RID label 9

**IMDG class** 9

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ICAO class/division 9

ADN class 9

Transport labels



#### 14.4. Packing group

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

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



# 14.6. Special precautions for user

Not available.

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

Transport in bulk according to Not relevant.

Annex II of MARPOL 73/78

and the IBC Code

# SECTION 15: Regulatory information

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

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009

No. 716).

**EU legislation** Dangerous Substances 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 (as

amended).

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) (as amended).

Health and environmental

listings

Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer (as amended). Regulation (EC) 689/2008 of the European Parliament and of the Council of 17 June 2008 concerning the export and

import of dangerous chemicals (as amended). None of the ingredients are listed.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions on use are known for this product.

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#### 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.

Key literature references and sources for data

C.D.S. Tomlin, 2009. The Pesticide Manual, 15th Edition (BCPC). 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. European Chemicals Agency, http://echa.europa.eu/ EC Directives 2006/15/EC, 2009/161/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 (as amended). Commission

Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended).

**Revision comments** This is first issue.

Revision date 31/03/2016

Revision 0

SDS number 20564

Hazard statements in full H302 Harmful if swallowed.

H331 Toxic if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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.