



**SAFETY DATA SHEET**  
**PERMOST CS**

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

**1.1. Product identifier**

**Product name** PERMOST CS  
**Product number** PERTWE0250CSA

**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**

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification**

**Physical hazards**

Not Classified

**Health hazards**

Skin Sens. 1 - H317

**Environmental hazards**

Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

**2.2. Label elements**

**Pictogram**



**Signal word**

Warning

**Hazard statements**

H317 May cause an allergic skin reaction.  
H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

**PERMOST CS**

- P273 Avoid release to the environment.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P391 Collect spillage.  
 P501 Dispose of contents/container in accordance with national regulations.  
 P280 Wear protective gloves.  
 P363 Wash contaminated clothing before reuse.

**Supplemental label information**

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

**Contains**

PERMETHRIN

**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**

<b>PERMETHRIN</b>	<b>10-30%</b>
CAS number: 52645-53-1 EC number: 258-067-9 M factor (Acute) = 1000 M factor (Chronic) = 1000	
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Acute Tox. 4 - H332	Xn;R20/22 R43 N;R50/53
Acute Tox. 4 - H302	
Skin Sens. 1 - H317	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
<b>1,2-PROPANDIOL</b>	<b>10-30%</b>
CAS number: 57-55-6 EC number: 200-338-0 REACH registration number: 01-2119456809-23-XXXX	
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
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. Get medical attention immediately. CAUTION! First aid personnel must be aware of own risk during rescue! Place unconscious person on their side in the recovery position and ensure breathing can take place. Remove contaminated clothing.

**Inhalation**

Remove person to fresh air and keep comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. 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. Get medical attention immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

**Skin contact**

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

**Eye contact**

## PERMOST CS

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if irritation persists after washing.

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

#### **General information**

No data available.

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

#### **Notes for the doctor**

Treat symptomatically.

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## **SECTION 5: Firefighting measures**

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### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Water spray, foam, dry powder or carbon dioxide.

#### **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**

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Combustion products of this material have to be classed invariably as respiratory poison.

#### **Hazardous combustion products**

When heated, vapours/gases hazardous to health may be formed. Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen chloride (HCl).

### **5.3. Advice for firefighters**

#### **Protective actions during firefighting**

In case of fire and/or explosion do not breathe fumes. Contain and collect extinguishing water. Avoid releasing into the environment. Avoid the spillage or runoff entering drains, sewers or watercourses.

#### **Special protective equipment for firefighters**

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

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## **SECTION 6: Accidental release measures**

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

#### **Personal precautions**

Avoid contact with skin, eyes and clothing. 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. DO NOT touch spilled material! In case of entry into waterways, soil or drains, inform the responsible authorities.

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

#### **Methods for cleaning up**

Contain spillage with sand, earth or other suitable non-combustible material. 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. Dispose of contents/container in accordance with local regulations.

### **6.4. Reference to other sections**

#### **Reference to other sections**

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

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## **SECTION 7: Handling and storage**

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## PERMOST CS

### 7.1. Precautions for safe handling

#### Usage precautions

Handle and open container with care. Avoid contact with skin and eyes. If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. Do not eat, drink or smoke when using this product.

#### Advice on general occupational hygiene

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Wash promptly with soap and water if skin becomes contaminated. Wash hands thoroughly after handling. Remove contaminated clothing. Do not breathe spray. Keep away from food and drink.

### 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 (see Section 10).

### 7.3. Specific end use(s)

#### Specific end use(s)

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

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## SECTION 8: Exposure Controls/personal protection

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### 8.1. Control parameters

#### Occupational exposure limits

##### 1,2-PROPANDIOL

Long-term exposure limit (8-hour TWA): WEL 150 ppm 474 mg/m<sup>3</sup> total vapour and particulates

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> particulate

WEL = Workplace Exposure Limit

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

DNEL	Industry - Inhalation; Long term systemic effects: 168 mg/m <sup>3</sup> Industry - Inhalation; Long term local effects: 10 mg/m <sup>3</sup> Consumer - Inhalation; Long term systemic effects: 50 mg/m <sup>3</sup> Consumer - Inhalation; Long term local effects: 10 mg/m <sup>3</sup>
PNEC	- Fresh water; 260 mg/l - Marine water; 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

### 8.2. Exposure controls

#### Appropriate engineering controls

Provide adequate ventilation.

#### Eye/face protection

Wear approved safety goggles (EN 166).

#### Hand protection

Wear protective gloves (EN 374).

#### Other skin and body protection

Chemical-resistant work clothes.

#### Hygiene measures

Good personal hygiene procedures should be implemented. Wash skin thoroughly after handling.

#### Respiratory protection

Change work clothing daily before leaving workplace. Filter A or environment-independant breathing apparatus.

## PERMOST CS

### Thermal hazards

No data available.

### Environmental exposure controls

Avoid the spillage or runoff entering drains, sewers or watercourses. Do not release into the environment.

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## SECTION 9: Physical and Chemical Properties

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### 9.1. Information on basic physical and chemical properties

#### Appearance

Liquid.

#### Colour

White to beige

#### Odour

Cocoate.

#### Odour threshold

Not determined.

#### pH

pH (diluted solution): 4.0 - 6.5 of 1% solution

#### Melting point

Not available.

#### Initial boiling point and range

Not available.

#### Flash point

88°C EEC A9

#### Evaporation rate

Not available.

#### Flammability (solid, gas)

Not available.

#### Upper/lower flammability or explosive limits

Not available.

#### Other flammability

Not available.

#### Vapour pressure

Not available.

#### Vapour density

Not available.

#### Relative density

1.04 - 1.07 g/cm<sup>3</sup> @ 20°C

#### Bulk density

Not available.

#### Solubility(ies)

Dispersible in water.

#### Partition coefficient

Not available.

#### Auto-ignition temperature

Not available.

#### Decomposition Temperature

Not available.

#### Viscosity

## PERMOST CS

457 mPa s @ 20°C 236 mPa s @ 40°C 11.28 Pa @ 20°C 11.90 Pa @ 40°C

### **Explosive properties**

Not explosive.

### **Oxidising properties**

Not available.

## **9.2. Other information**

### **Other information**

Not available.

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

No data available.

### **10.2. Chemical stability**

#### **Stability**

No data available.

### **10.3. Possibility of hazardous reactions**

No data available.

### **10.4. Conditions to avoid**

Stable at normal ambient temperatures and when used as recommended.

### **10.5. Incompatible materials**

#### **Materials to avoid**

No data available.

### **10.6. Hazardous decomposition products**

None under normal conditions.

## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

#### **Acute toxicity - oral**

LD<sub>50</sub> >5000 mg/kg, Oral, Rat OECD 425 Based on available data the classification criteria are not met.

#### **Acute toxicity - dermal**

LD<sub>50</sub> >2000 mg/kg, Dermal, Rat OECD 402. Based on available data the classification criteria are not met.

#### **Acute toxicity - inhalation**

LC<sub>50</sub> >5 mg/l (4 hrs), Inhalation, Rat OECD 403. Based on available data the classification criteria are not met.

#### **Skin corrosion/irritation**

##### **Animal data**

Rabbit OECD 404. Not irritating.

#### **Serious eye damage/irritation**

Rabbit OECD 429. Not irritating.

#### **Respiratory sensitisation**

Based on available data the classification criteria are not met.

#### **Skin sensitisation**

OECD 429. - Mouse: Sensitising.

#### **Germ cell mutagenicity**

##### **Genotoxicity - in vitro**

Based on available data the classification criteria are not met.

#### **Carcinogenicity**

## PERMOST CS

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.

#### **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

Based on available data the classification criteria are not met.

### **Skin contact**

The product contains a sensitising substance. May cause sensitisation by skin contact.

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## **SECTION 12: Ecological Information**

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### **Ecotoxicity**

Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.

### **12.1. Toxicity**

#### Ecological information on ingredients.

#### PERMETHRIN

#### **Acute aquatic toxicity**

##### **LE(C)<sub>50</sub>**

$0.0001 < L(E)C_{50} \leq 0.001$

##### **M factor (Acute)**

1000

#### **Acute toxicity - fish**

LC<sub>50</sub>, 96 hours: 0.62 µg/l, *Salmo gairdneri* (Rainbow trout)

#### **Acute toxicity - aquatic invertebrates**

EC<sub>50</sub>, 96 hours: 0.62 µg/l, *Daphnia magna*

#### **Acute toxicity - aquatic plants**

ErC<sub>50</sub>, 96 hours: 92 µg/l, *Skeletonema costatum*

#### Chronic aquatic toxicity

##### **M factor (Chronic)**

1000

### **12.2. Persistence and degradability**

#### Ecological information on ingredients.

#### PERMETHRIN

#### **Persistence and degradability**

This product is not expected to be readily biodegradable.

#### **Biodegradation**

Soil - DT<sub>50</sub> : < 28 days

### **12.3. Bioaccumulative potential**

## PERMOST CS

### Partition coefficient

Not available.

#### Ecological information on ingredients.

#### PERMETHRIN

BCF: < 750,

### Partition coefficient

log Kow: = 6.5

### 12.4. Mobility in soil

#### Ecological information on ingredients.

#### PERMETHRIN

### Mobility

Not considered mobile.

### Adsorption/desorption coefficient

Soil - Koc: > 5000 @ °C

### 12.5. Results of PBT and vPvB assessment

#### Ecological information on ingredients.

#### PERMETHRIN

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

### 12.6. Other adverse effects

#### Ecological information on ingredients.

#### PERMETHRIN

Not known.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

#### General information

This material and its container must be disposed of as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not reuse empty containers.

## **SECTION 14: Transport information**

### 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 Permethrin)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Contains Permethrin)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Contains Permethrin)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Contains Permethrin)

### 14.3. Transport hazard class(es)

ADR/RID class	9
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## PERMOST CS

ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

### Transport labels



### 14.4. Packing group

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

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



Yes.

### 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

#### National regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). EH40/2005 Workplace exposure limits.

#### 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). Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances. Annex I, Part 2, Category 9(i).

#### 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). The following ingredients are listed: Permethrin

#### 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.

### 15.2. Chemical safety assessment

## PERMOST CS

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

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). 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). Dangerous Substances Directive 67/548/EEC. Supplier safety data sheet (SDS).

#### Revision comments

This is first issue.

**Revision date** 21/01/2015

**SDS number** 20402

#### Hazard statements in full

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### 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.