



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

PERMETHRIN	10-30%
CAS number: 52645-53-1 EC number: 258-067-9 M factor (Acute) = 1000 M factor (Chronic) = 1000	
Classification Acute Tox. 4 - H332 Acute Tox. 4 - H302 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC or 1999/45/EC) Xn;R20/22 R43 N;R50/53
1,2-PROPANDIOL	10-30%
CAS number: 57-55-6 EC number: 200-338-0 REACH registration number: 01-2119456809-23-XXXX	
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC) -

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.

SECTION 5: Firefighting measures

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 (CO₂). 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.

SECTION 6: Accidental release measures

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.

SECTION 7: Handling and storage

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.

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/m ³ Industry - Inhalation; Long term local effects: 10 mg/m ³ Consumer - Inhalation; Long term systemic effects: 50 mg/m ³ Consumer - Inhalation; Long term local effects: 10 mg/m ³
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.

SECTION 9: Physical and Chemical Properties

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/cm³ @ 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

LD₅₀ >5000 mg/kg, Oral, Rat OECD 425 Based on available data the classification criteria are not met.

Acute toxicity - dermal

LD₅₀ >2000 mg/kg, Dermal, Rat OECD 402. Based on available data the classification criteria are not met.

Acute toxicity - inhalation

LC₅₀ >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.

SECTION 12: Ecological Information

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)₅₀

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

M factor (Acute)

1000

Acute toxicity - fish

LC₅₀, 96 hours: 0.62 µg/l, *Salmo gairdneri* (Rainbow trout)

Acute toxicity - aquatic invertebrates

EC₅₀, 96 hours: 0.62 µg/l, *Daphnia magna*

Acute toxicity - aquatic plants

ErC₅₀, 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 - DT₅₀ : < 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)

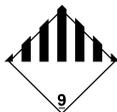
14.3. Transport hazard class(es)

ADR/RID class	9
---------------	---

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.