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# 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 th	e 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 sds@hockley.co.uk		
1.4. Emergency telephone number			
Emergency telephone	+44 (0)800 246 1274 (24 hours)		
SECTION 2: Hazards identificatio	n		
2.1. Classification of the substance or mixture Classification (SI 2019 No. 720)			
Physical hazards	Not Classified		
Health hazards	Skin Sens. 1 - H317		
Environmental hazards	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		
2.2. Label elements			
Hazard pictograms			
Signal word	Warning		
Hazard statementsH317 May cause an allergic skin reaction.H410 Very toxic to aquatic life with long lasting effects.			
Precautionary statementsP273 Avoid release to the environment. P280 Wear protective gloves. P391 Collect spillage. P302+P352 IF ON SKIN: Wash with plenty of water. P363 Wash contaminated clothing before reuse. 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.		
Contains PERMETHRIN (25:75) TECHNICAL			



Supplementary precautionary	P261 Avoid breathing vapour/ spray.
statements	P272 Contaminated work clothing should not be allowed out of the workplace.
	P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.

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 (25:75) TECHNICAL		10-30%
CAS number: 52645-53-1	EC number: 258-067-9	
M factor (Acute) = 1000 M factor (Chronic) = 1000		
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC or 1999/45/EC) Xn; R20/22. N; R50/53. R43	
1,2-PROPANDIOL CAS number: 57-55-6	EC number: 200-338-0	10-25%
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	of first aid measures	
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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	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

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## PERMOST CS

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 (HCI).		
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 m	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 conta	ainment 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			
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)	ecific end use(s) The identified uses for this product are detailed in Section 1.2.		
SECTION 8: Exposure controls/Pe	ersonal protection		
8.1. Control parameters			
Occupational exposure limits 1,2-PROPANDIOL			
Long-term exposure limit (8-hour Long-term exposure limit (8-hour WEL = Workplace Exposure Limit			
	PERMETHRIN (25:75) TECHNICAL (CAS: 52645-53-1)		
PNEC	- water; 0.00047 μg/l		
	- STP; 0.00495 mg/l - Soil; > 0.0876 mg/kg		
	- Sediment (Freshwater); 0.001 mg/kg		
	-;		
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.		
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 chemic	al properties		

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## PERMOST CS

9.1. Information on basic physical and chemical properties		
Appearance	Liquid.	
Colour	White to beige	
Odour	Cocoate.	
Odour threshold	Not determined.	
рН	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	354°C	
Decomposition Temperature	Not available.	
Viscosity	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	Does not meet the criteria for classification as oxidising.	
9.2. Other information		
Other information	Not available.	

## SECTION 10: Stability and reactivity

10.1. Reactivity		
Reactivity	No data available.	
10.2. Chemical stability		
Stability	No data available.	
10.3. Possibility of hazardous reactions		
Possibility of hazardous reactions	No data available.	
10.4. Conditions to avoid		

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## PERMOST CS

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	
Hazardous decomposition products	None under normal conditions.	
SECTION 11: Toxicological inform	mation	
11.1. Information on toxicological	effects	
Acute toxicity - oral Notes (oral LD₅₀)	LD₅₀ >5000 mg/kg, Oral, Rat OECD 425 Based on available data the classification criteria are not met.	
Acute toxicity - dermal Notes (dermal LD₅₀)	LD₅₀ >2000 mg/kg, Dermal, Rat OECD 402. Based on available data the classification criteria are not met.	
Acute toxicity - inhalation Notes (inhalation LC₅₀)	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 Serious eye damage/irritation	Rabbit OECD 429. Not irritating.	
Respiratory sensitisation Respiratory sensitisation	Based on available data the classification criteria are not met.	
Skin sensitisation Skin sensitisation	OECD 429 Mouse: Sensitising.	
Germ cell mutagenicity Genotoxicity - in vitro	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.	
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 - rep STOT - repeated exposure	beated 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.	
Skin contact	The product contains a sensitising substance. May cause sensitisation by skin contact.	

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## PERMOST CS

### SECTION 12: Ecological information Ecotoxicity Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects. 12.1. Toxicity Acute aquatic toxicity LC50, 96 hours: 0.0089 mg/l, Poecilia reticulata (Guppy) Acute toxicity - fish Acute toxicity - aquatic EC50, 24 hours: 0.02 mg/l, Daphnia magna invertebrates Ecological information on ingredients. PERMETHRIN (25:75) TECHNICAL Very toxic to aquatic life with long lasting effects. Toxicity Acute aquatic toxicity $0.0001 < L(E)C50 \le 0.001$ LE(C)₅₀ M factor (Acute) 1000 Acute toxicity - fish LC50, 96 hours: 0.62 µg/l, Salmo gairdneri (Rainbow trout) Acute toxicity - aquatic EC50, 96 hours: 0.62 µg/l, Daphnia magna invertebrates Acute toxicity - aquatic plants ErC50, 96 hours: 92 µg/l, Skeletonema costatum Chronic aquatic toxicity M factor (Chronic) 1000 12.2. Persistence and degradability Persistence and degradability No data available. Ecological information on ingredients. PERMETHRIN (25:75) TECHNICAL Persistence and degradability This product is not expected to be readily biodegradable. Water - DT<sub>50</sub> : < 28 days Biodegradation 12.3. Bioaccumulative potential Bioaccumulative potential No data available. Partition coefficient Not available. Ecological information on ingredients. PERMETHRIN (25:75) TECHNICAL Bioaccumulative potential BCF: < 750, Partition coefficient log Kow: 4.67 12.4. Mobility in soil Mobility No data available.

	<b>N</b>

Ecological information on ingredients.

PERMETHRIN (25:75) TECHNICAL

	Mobility	N	ot considered mobile.
	Adsorption/desorption coefficient		′ater - Koc: > 5000 @ °C
12.5. Results	of PBT and vPvB as	sessment	
Results of PB assessment			does not contain any substances classified as PBT or vPvB.
Ecological info	ormation on ingredie	nts.	
			PERMETHRIN (25:75) TECHNICAL
	Results of PBT and assessment	vPvB TI	nis substance is not classified as PBT or vPvB according to current UK criteria.
12.6. Other a	dverse effects		
Other adverse	e effects	Not known.	
Ecological info	ormation on ingredie	nts.	
			PERMETHRIN (25:75) TECHNICAL
	Other adverse effect	ts N	ot known.
SECTION 13	: Disposal considerat	ions	
13.1. Waste t	reatment methods		
General inforr	waste dis		and its container must be disposed of as hazardous waste. Dispose of waste to licensed al site in accordance with the requirements of the local Waste Disposal Authority. Do not containers.
SECTION 14:	Transport information	n	
General		packagings o	ally Hazardous Substance Mark NOT required for single packagings and combination containing inner packagings $\leq$ 5L for liquids, or $\leq$ 5kg for solids. (ADR special provision 375, 2.10.2.7, IATA special provision A197)
		inner packag for solids are packagings r pollutants als	ants packaged in single or combination packagings containing a net quantity per single or ing of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less not subject to any other provisions of the Code relevant to marine pollutants provided the neet 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 so meeting the criteria for inclusion in another hazard class all provisions of this Code ny additional hazards continue to apply.
14.1. UN num	ıber		
UN No. (ADR	/RID)	3082	
UN No. (IMDO	G)	3082	
UN No. (ICAC	D)	3082	
UN No. (ADN	)	3082	

14.2. UN proper shipping name



Proper shipping name (ADR/RID)	EN
Proper shipping name (IMDG)	EN
Proper shipping name (ICAO)	EN
Proper shipping name (ADN)	EN
14.3. Transport hazard class(es)	
ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9
Transport labels	

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Permethrin) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Permethrin) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Permethrin) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Permethrin)

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14.4. Packing group	
ADR/RID packing group	111
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 MARPOL 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 regulationsThe Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).EH40/2005 Workplace exposure limits.



### EU legislation

	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	The following ingredients are listed: Permethrin			
Authorisations (SI 2020 No. 1577 Annex XIV)	No specific authorisations are known for this product.			
Restrictions (SI 2020 No. 1577 Annex XVII)	No specific restrictions on use are known for this product.			
15.2. Chemical safety assessment				
No chemical safety assessment has been carried out.				

### SECTION 16: Other information

Abbreviations and acronyms used	PBT - Persistent, bioaccumulative and toxic.
in the safety data sheet	vPvB - Very persistent and very bioaccumulative
	EN - European standard adopted by the European Committee for Standardisation.
Key literature references and	Supplier safety data sheet (SDS). Disseminated REACH registration dossier -
sources for data	http://apps.echa.europa.eu/registered/registered-sub.aspx European Chemicals Agency,
	http://echa.europa.eu/
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	14/02/2024
Revision	2.4
Supersedes date	10/05/2022
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.

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.