

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878. Issue date: 09/08/2024 Version: 1.0

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

: Consumer use : Bathroom cleaners

1.1. Product identifier

Product form Product name Product code Type of product	 Mixture HG hygienic whirlpool bath cleaner 448 ART Detergent
Product group	: Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Intended for general public Main use category Function or use category

1.2.2. Uses advised against

Restrictions on use

: All other uses not recommended above

1.3. Details of the supplier of the safety data sheet

Manufacturer	Distributor
HG International B.V.	HG UKI LTD
P.J. Oudweg 41	Weston Business Centre
NL– 1314 CJ Almere	Parsonage Road
The Netherlands	UK– CM22 6PU Takeley – Essex
T +31 (0)36 54 94 700	United Kingdom
<u>safety@hg.eu</u> - <u>www.hg.eu</u>	T +44 (0) 1206 822 744
	www.hg.eu

1.4. Emergency telephone number

Emergency number

: +31 (0)36 54 94 777 Only for medical personnel Mon-Fri 09:00 AM - 05:00 PM (CEST)

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	

SECTION 2: Hazards identification

Classification according to GB CLP (SI 2019:720 as amended)	
Skin corrosion/irritation, Category 1, Sub-Category 1C	H314
Serious eye damage/eye irritation, Category 1	H318

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage. Causes serious eye damage.

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

2.2. Label elements	
Labelling according to GB CLP (SI 2019:720 as	amended)
Hazard pictograms (GB CLP)	: GHS05
Signal word (GB CLP)	: Danger
Contains	: Sodium etasulphate; Alcohols, C12-16, ethoxylated; L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid
Hazard statements (GB CLP)	: H314 - Causes severe skin burns and eye damage.
Precautionary statements (GB CLP)	: P101 - If medical advice is needed, have product container or label at hand.
	P102 - Keep out of reach of children.
	P280 - Wear eye protection, protective gloves.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
	P310 - Immediately call a POISON CENTER, a doctor.
	P501 - Dispose of contents and container to an approved waste disposal plant.
Child-resistant fastening	: Applicable
Tactile warning	: Applicable
2.3. Other hazards	

Other hazards which do not result in classification

: May cause flammable vapours to be released.

Component	
Substance(s) not meeting the PBT criteria of UK REACH regulation, in accordance with Annex XIII	Sodium etasulphate (126-92-1), propan-2-ol; isopropyl alcohol; isopropanol (67-63-0), Alcohols, C12-16, ethoxylated (68551-12-2), L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid (79-33-4), Bornan-2-one (76-22-2)(¹), Diphenyl ether (101-84-8)(¹)
Substance(s) not meeting the vPvB criteria of UK REACH regulation, in accordance with Annex XIII	Sodium etasulphate (126-92-1), propan-2-ol; isopropyl alcohol; isopropanol (67-63-0), Alcohols, C12-16, ethoxylated (68551-12-2), L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid (79-33-4), Bornan-2-one (76-22-2) ⁽¹⁾ , Diphenyl ether (101-84-8) ⁽¹⁾
Component	
Substance(s) not included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP	L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid(79-33-4), propan-2-ol; isopropyl alcohol; isopropanol(67-63-0), Sodium etasulphate(126-92-1), Alcohols, C12-16, ethoxylated(68551-12-2), Diphenyl ether(101-84-8)(¹), Bornan-2-one (76-22-2)(¹)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid	CAS-No.: 79-33-4 EC-No.: 201-196-2 REACH-no: 01-2119474164- 39	≥7-<10	Skin Corr. 1C, H314 Eye Dam. 1, H318

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
propan-2-ol; isopropyl alcohol; isopropanol	CAS-No.: 67-63-0 EC-No.: 200-661-7 UK Index-No.: 603-117-00-0 REACH-no: 01-2119457558- 25	≥2-<5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Sodium etasulphate	CAS-No.: 126-92-1 EC-No.: 204-812-8 REACH-no: 01-2119971586- 23	≥2-<5	Skin Irrit. 2, H315 Eye Dam. 1, H318
Alcohols, C12-16, ethoxylated	CAS-No.: 68551-12-2 EC-No.: 500-221-7	≥1-<2	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Dam. 1, H318 Aquatic Chronic 3, H412
Diphenyl ether	CAS-No.: 101-84-8 EC-No.: 202-981-2 REACH-no: 01-2119472545- 33	≥ 0.001 – < 0.1	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Bornan-2-one	CAS-No.: 76-22-2 EC-No.: 200-945-0 REACH-no: 01-2119966156- 31	≥ 0.01 – < 0.1	Flam. Sol. 1, H228 Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 2, H371 Aquatic Chronic 2, H411

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Call a physician immediately.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.
4.2. Most important symptoms and ef	fects, both acute and delayed
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact Symptoms/effects after ingestion	: Serious damage to eyes. : Burns.
Symptoms/enects and ingestion	. Dunis.

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

Treat symptomatically.

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media Unsuitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.Do not use a heavy water stream.
5.2. Special hazards arising from the subs	tance or mixture
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 Flammable liquid. Intense heat may cause container to burst. Toxic fumes may be released.
5.3. Advice for firefighters	
Precautionary measures fire Firefighting instructions Protection during firefighting	 Runoff from fire control or dilution water may cause pollution. Control run-off water by containing and keeping it out of sewers and watercourses. Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equipment and emergency procedures		
General measures	: Do not handle until all safety precautions have been read and understood. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.	
6.1.1. For non-emergency personnel		
Protective equipment	: Wear recommended personal protective equipment. See Section 8 for information on personal protection equipment.	
Emergency procedures	: Ventilate spillage area. Keep unnecessary and unprotected personnel away from the spillage. Avoid contact with skin and eyes. Do not breathe mist, vapours.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for containment and cleaning up		

For containment :	Stop leak if safe to do so. Do not touch or walk on the spilled product. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Dilute small spillage well and wash away with large quantities of water. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up :	Take up liquid spill into absorbent material. Clear up spills immediately and dispose of waste safely.
Other information :	Spilled product must never be returned to the original container for recycling. Collect all waste in suitable and labelled containers and dispose according to local legislation. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of contaminated materials refer to section 13 : "Disposal considerations".

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling	 Not expected to present a significant hazard under anticipated conditions of normal use. Ensure good ventilation of the work station. Prevent aerosol formation or splashes. Avoid contact with skin and eyes. Do not breathe mist, vapours. Wear personal protective equipment.
Hygiene measures	: Remove contaminated clothes. Wash contaminated clothing before reuse. Do not eat, drinl or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, include	ding any incompatibilities
Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	 Store in dry, cool, well-ventilated area. Keep container tightly closed. Protect from sunlight. Store locked up.
Incompatible materials	: Strong bases.
Storage temperature	: > 0 - < 30 °C
Heat and ignition sources	: Keep away from heat and direct sunlight.
Storage area	: Store according to local legislation. keep in frostfree area.
Special rules on packaging	 Keep only in original container. Opened containers must be carefully closed and kept upright to avoid leakage.
Packaging materials	: Store always product in container of same material as original container.

No additional information available

SECTION 8: Exposure controls/personal protection		
8.1. Control parameters		
8.1.1 National occupational exposure and biological limit values		
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
United Kingdom - Occupational Exposure Limits		
Local name	Propan-2-ol	
WEL TWA (OEL TWA)	999 mg/m³	
	400 ppm	
WEL STEL (OEL STEL)	1250 mg/m ³	
	500 ppm	

Regulatory reference

Bornan-2-one

(76-22-2)

United Kingdom - Occupational Exposure Limits	
Local name Bornan-2-one	
WEL TWA (OEL TWA)	13 mg/m ³
	2 ppm
WEL STEL (OEL STEL)	19 mg/m³
	3 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

EH40/2005 (Fourth edition, 2020). HSE

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

Diphenyl ether (101-84-8)	
United Kingdom - Occupational Exposure Limits	
Local name Diphenyl ether	
WEL TWA (OEL TWA)	7 mg/m³
	1 ppm
WEL STEL (OEL STEL)	14 mg/m³
	2 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Safety glasses. Gloves. Protective clothing. Wear foot protection. **Personal protective equipment symbol(s):**



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses with side shields	Normal use conditions		EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Skin and body protection		
Туре	Standard	
Long sleeved protective clothing		
Chemical resistant safety shoes	EN ISO 20345	
Use chemically protective clothing	EN 14605	

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Butyl rubber	6 (> 480 minutes)	0.5		EN ISO 374
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.35		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection			
Device	Filter type	Condition	Standard
Half-mask	FFA2P3	Mist formation, Vapour protection	EN 405

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment. Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

	nemical properties
Physical state Colour Odour Ddour threshold DH Solution Melting point Freezing point Boiling point Eash point Eash point Explosive limits /apour pressure /apour pressure at 50°C Relative vapour density at 20°C Relative density	: Liquid : Blue. : Floral. : Not available : $1.4 - 2.4$: 100% : $0 °C$: Not available : $82.5 °C$: $53 °C$ (closed cup) : Not available : $1.02 - 1.03$
Density Solubility Partition coefficient n-octanol/water (Log Kow) Auto-ignition temperature Decomposition temperature /iscosity, kinematic /iscosity, dynamic Explosive properties	 Not available In water, material soluble. Not available 399 °C Not available Not available 26 mPa·s (room temperature) Not available
9.2. Other information	

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

SECTION 10: Stability and reactivity
10.1. Reactivity
No additional information available
10.2. Chemical stability
No additional information available
10.3. Possibility of hazardous reactions
No additional information available
10.4. Conditions to avoid
No additional information available
10.5. Incompatible materials
Alkalines.
10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects	
Acute toxicity (dermal) :	Not classified (Conclusive but not sufficient for classification) Not classified (Conclusive but not sufficient for classification) Not classified (Conclusive but not sufficient for classification)
Sodium etasulphate (126-92-1)	
LD50 oral rat	4000 mg/kg Source: NLM
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	6540 mg/kg Source: NLM
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)
LD50 oral rat	5840 mg/kg Source: ECHA
LD50 oral	4396 mg/kg bodyweight
LD50 dermal rabbit	12800 mg/kg Source: ECHA
LC50 Inhalation - Rat (Dust/Mist)	46600 mg/l
L-(+)-lactic acid; (2S)-2-hydroxypropanoic aci	d (79-33-4)
LD50 dermal rat	>
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OPP 81-2 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 7.94 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Bornan-2-one (76-22-2)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 10 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	> 5 mg/l

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

Diphenyl ether (101-84-8)	
LD50 oral rat	2830 mg/kg Source: ECHA
Skin corrosion/irritation :	Causes severe skin burns. pH: 1.4 – 2.4
Sodium etasulphate (126-92-1)	
рН	10.5 – 11.5
Serious eye damage/irritation :	Causes serious eye damage. pH: 1.4 – 2.4
Sodium etasulphate (126-92-1)	
рН	10.5 – 11.5
Respiratory or skin sensitisation :	Not classified (Conclusive but not sufficient for classification)
Germ cell mutagenicity :	Not classified (Conclusive but not sufficient for classification)
Carcinogenicity :	Not classified (Conclusive but not sufficient for classification)
Reproductive toxicity :	Not classified (Conclusive but not sufficient for classification)
STOT-single exposure :	Not classified (Conclusive but not sufficient for classification)
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)
STOT-single exposure	May cause drowsiness or dizziness.
Bornan-2-one (76-22-2)	
STOT-single exposure	May cause damage to organs.
STOT-repeated exposure :	Not classified (Conclusive but not sufficient for classification)
Sodium etasulphate (126-92-1)	
LOAEL (oral, rat, 90 days)	1016 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	488 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity Study in Rodents)
Diphenyl ether (101-84-8)	
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight Animal: rat
Aspiration hazard :	Not classified (Conclusive but not sufficient for classification)
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)
Viscosity, kinematic	2.658 mm ² /s
11.2. Information on other hazards	

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general Hazardous to the aquatic environment, short–term	Before neutralisation, the product may represent a danger to aquatic organisms.Not classified (Conclusive but not sufficient for classification)
(acute) Hazardous to the aquatic environment, long–term (chronic)	: Not classified (Conclusive but not sufficient for classification)

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

Sodium otoculabote (426.02.4)		
Sodium etasulphate (126-92-1)		
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	483 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	> 511 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
LOEC (chronic)	6.86 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	1.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC chronic fish	≥ 1357 mg/l Test organisms (species): Pimephales promelas Duration: '42 d'	
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LC50 - Fish [1]	10000 mg/l Test organisms (species): Pimephales promelas	
L-(+)-lactic acid; (2S)-2-hydroxypropanoic ac	id (79-33-4)	
LC50 - Fish [1]	195 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	130 mg/l Test organisms (species): Daphnia magna	
NOEC chronic algae	1900 mg/l	
Diphenyl ether (101-84-8)		
LC50 - Fish [1]	4.2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	1.96 mg/l Test organisms (species): Daphnia magna	
ErC50 algae	0.455 mg/l Source: ECHA	
12.2. Persistence and degradability		
HG hygienic whirlpool bath cleaner		
HG hygienic whirlpool bath cleaner Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.	
	criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent	
Persistence and degradability	criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent	
Persistence and degradability Sodium etasulphate (126-92-1)	criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.	
Persistence and degradability Sodium etasulphate (126-92-1) Persistence and degradability	criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.	
Persistence and degradability Sodium etasulphate (126-92-1) Persistence and degradability propan-2-ol; isopropyl alcohol; isopropanol (criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. Rapidly degradable 67-63-0)	
Persistence and degradability Sodium etasulphate (126-92-1) Persistence and degradability propan-2-ol; isopropyl alcohol; isopropanol (Persistence and degradability	criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. Rapidly degradable 67-63-0)	
Persistence and degradability Sodium etasulphate (126-92-1) Persistence and degradability propan-2-ol; isopropyl alcohol; isopropanol (Persistence and degradability Alcohols, C12-16, ethoxylated (68551-12-2)	criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. Rapidly degradable Rapidly degradable Rapidly degradable	
Persistence and degradability Sodium etasulphate (126-92-1) Persistence and degradability propan-2-ol; isopropyl alcohol; isopropanol (Persistence and degradability Alcohols, C12-16, ethoxylated (68551-12-2) Persistence and degradability	criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. Rapidly degradable Rapidly degradable Rapidly degradable	
Persistence and degradability Sodium etasulphate (126-92-1) Persistence and degradability propan-2-ol; isopropyl alcohol; isopropanol (Persistence and degradability Alcohols, C12-16, ethoxylated (68551-12-2) Persistence and degradability L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid	criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.	
Persistence and degradability Sodium etasulphate (126-92-1) Persistence and degradability propan-2-ol; isopropyl alcohol; isopropanol (Persistence and degradability Alcohols, C12-16, ethoxylated (68551-12-2) Persistence and degradability L-(+)-lactic acid; (2S)-2-hydroxypropanoic aci Persistence and degradability Bornan-2-one	criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.	
Persistence and degradability Sodium etasulphate (126-92-1) Persistence and degradability propan-2-ol; isopropyl alcohol; isopropanol (Persistence and degradability Alcohols, C12-16, ethoxylated (68551-12-2) Persistence and degradability L-(+)-lactic acid; (2S)-2-hydroxypropanoic aci Persistence and degradability Bornan-2-one (76-22-2)	criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. Rapidly degradable 67-63-0) Rapidly degradable id (79-33-4) Readily biodegradable.	

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

12.3. Bioaccumulative potential			
HG hygienic whirlpool bath cleaner			
Bioaccumulative potential	No bioaccumulation expected.		
Sodium etasulphate (126-92-1)			
Partition coefficient n-octanol/water (Log Pow)	-0.35		
propan-2-ol; isopropyl alcohol; isopropanol (6	57-63-0)		
Partition coefficient n-octanol/water (Log Pow)	0.05		
Alcohols, C12-16, ethoxylated (68551-12-2)			
Partition coefficient n-octanol/water (Log Pow)	5.96 Source: Ecological Structure Activity Relationships		
L-(+)-lactic acid; (2S)-2-hydroxypropanoic aci	d (79-33-4)		
Partition coefficient n-octanol/water (Log Pow)	-0.62		
Bornan-2-one (76-22-2)			
Partition coefficient n-octanol/water (Log Pow)	2.38 Source: HSDB		
Diphenyl ether (101-84-8)			
Partition coefficient n-octanol/water (Log Pow)	4.21 Source: ECHA		
12.4. Mobility in soil			
Alcohols, C12-16, ethoxylated (68551-12-2)			
Mobility in soil	13530 Source: EPI Suite		
12.5. Results of PBT and vPvB assessment			
Component			
Sodium etasulphate (126-92-1)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII		
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII		
Alcohols, C12-16, ethoxylated (68551-12-2)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII		
L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid (79-33- 4)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII		
Bornan-2-one (76-22-2)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII		

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

Component	
Diphenyl ether (101-84-8)	This product does not contain substances at $\geq 0.1\%$ that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at $\geq 0.1\%$ that meet the vPvB criteria of UK REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Regional waste regulation Waste treatment methods Sewage disposal recommendations Product/Packaging disposal recommendations	 Dispose of in accordance with relevant local regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions. Do not flush down sewers. Disposal must be done according to official regulations. Do not pierce or burn, even after use. Empty containers retain product residue and can be hazardous. Discharging into rivers and drains is forbidden. Do not dispose of the packaging without first carrying out the necessary cleaning. Disposal must be done according to official regulations. 	
Additional information HP Code	 Do not re-use empty containers. HP8 - "Corrosive:" waste which on application can cause skin corrosion. 	

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	ΙΑΤΑ	ADN	RID	
14.1. UN number	I4.1. UN number				
UN 3265	UN 3265	UN 3265	UN 3265	UN 3265	
14.2. UN proper shippin	g name			·	
CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid)	Corrosive liquid, acidic, organic, n.o.s. (CONTAINS : L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid)	
Transport document descr	iption	I		I	
UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid), 8, III, (E)	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid), 8, III	UN 3265 Corrosive liquid, acidic, organic, n.o.s. (CONTAINS : L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid), 8, III	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid), 8, III	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : L-(+)-lactic acid; (2S)-2- hydroxypropanoic acid), 8, III	
14.3. Transport hazard class(es)					
8	8	8	8	8	
8	8	B	8	B	
14.4. Packing group	14.4. Packing group				
III	111	III	III	Ш	

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

ADR	IMDG	ΙΑΤΑ	ADN	RID	
14.5. Environmental hazards					
Dangerous for the Dangerous for the		Dangerous for the	Dangerous for the	Dangerous for the	
environment: False	environment: False	environment: False	environment: False	environment: False	
Marine pollutant: No					
No supplementary information	available		<u> </u>	<u> </u>	
14.6. Special precautions	for user				
Overland transport					
Classification code (ADR)	: C	3			
Special provisions (ADR)		74			
_imited quantities (ADR)	: 5	I			
Excepted quantities (ADR)	: E	1			
Packing instructions (ADR)	: P	001, IBC03, LP01, R001			
Vixed packing provisions (ADR) : N	IP19			
Portable tank and bulk containe	er instructions (ADR) : T	7			
Portable tank and bulk containe	er special provisions : T	P1, TP28			
(ADR)					
Fank code (ADR)		4BN			
/ehicle for tank carriage	: A	Т			
Fransport category (ADR)	: 3				
Special provisions for carriage -					
lazard identification number (K	(emler No.) : <u>8</u>	0			
Orange plates	:	80			
		80			
		3265			
		3203			
Funnel restriction code (ADR)	: E				
EAC code	: 2	Х			
Fransport by sea					
Special provisions (IMDG)	: 2	23, 274			
_imited quantities (IMDG)		: 5L			
Excepted quantities (IMDG)		: E1			
Packing instructions (IMDG)		: P001, LP01			
BC packing instructions (IMDG		: IBC03			
Fank instructions (IMDG)	·	: T7			
Tank special provisions (IMDG)		: TP1, TP28			
EmS-No. (Fire)		: F-A			
EmS-No. (Spillage)	: S				
Stowage category (IMDG)	: A	: A			
Stowage and handling (IMDG)	: S	: SW2			
Segregation (IMDG)	: S	: SGG1, SG36, SG49			
Properties and observations (IN	1DG) : C	: Causes burns to skin, eyes and mucous membranes.			
Air transport					
PCA Excepted quantities (IATA)) : E	1			
PCA Limited quantities (IATA)	, : Ľ				
PCA limited quantity max net qu					
PCA packing instructions (IATA					
PCA max net quantity (IATA)	: 5				
CAO packing instructions (IATA					
CAO max net quantity (IATA)	: 6				
Special provisions (IATA)		3, A803			
ERG code (IATA)		<u>L</u>			
nland waterway transport					
Classification code (ADN)	: C	3			
Special provisions (ADN)		74			

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

Limited quantities (ADN) Excepted quantities (ADN)	: 5L : E1
	. = .
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
Rail transport	
Classification code (RID)	: C3
Special provisions (RID)	: 274
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions	: TP1, TP28
(RID)	
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 80
	. 00

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

UK REACH Annex XVII (Restriction List)

This product contains no substance(s) listed on UK REACH Annex XVII (Restriction List) equal to or above the level of SDS disclosure

UK REACH Annex XIV (Authorisation List)

This product contains no substance(s) listed on UK REACH Annex XIV (Authorisation List) equal to or above the 0.1% level of disclosure

UK REACH Candidate List (SVHC)

Contains no substance(s) listed on the UK REACH Candidate List

Detergent Regulation (648/2004)

Allergenic fragrances > 0.01 %: LIMONENE TERPINEOL CAMPHOR

GB PIC regulation (Prior Informed Conset)

This product contains no substance(s) listed on the GB PIC List equal to or above the level of SDS disclosure

POP Regulation (Persistent Organic Pollutants)

This product contains no substance(s) listed on the GB POP List equal to or above the level of SDS disclosure

Ozone Regulation (S.I. No. 168 of 2015)

This product contains no substance(s) listed on the GB Ozone Depletion List equal to or above the level of SDS disclosure

Control of Poisons and Explosives Precursors Act

This product contains no substance(s) listed as a reportable poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This product contains no substance(s) listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This product contains no substance(s) listed as a reportable explosive precursor on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This substance is not listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

Drug Precursors Regulation (273/2004)

This product contains no substance(s) listed on the GB Drug Precursors List equal to or above the level of SDS disclosure

15.1.2. Other Information

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes (UK):

UFI : Unique Formula Identifier.

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.

Abbreviations and acronyms:		
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disruptor	

Training advice

Other information

: Normal use of this product shall imply use in accordance with the instructions on the packaging. Ensure personnel is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.

: DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
H225	Highly flammable liquid and vapour.	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
H336	May cause drowsiness or dizziness.	
H400	Very toxic to aquatic life.	
H412	Harmful to aquatic life with long lasting effects.	
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis	

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.