HG limescale remover foam spray

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: 06/06/2024 Version: 1.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	HG limescale remover foam spray
Product code	:	218 ART
Type of product	:	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	:	Consumer use
Use of the substance/mixture	:	Descaling products

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
HG International B.V.
P.J. Oudweg 41
NL– 1314 CJ Almere
The Netherlands
T +31 (0)36 54 94 700
safety@hg.eu - www.hg.eu

Distributor
HG UKI LTD
Weston Business Centre
Parsonage Road
UK– CM22 6PU Takeley – Essex
United Kingdom
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

2.1. Classification of the substance or mixture

Classification according to GB CLP (SI 2019:720 as amended)

Skin corrosion/irritation, Category 1	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.

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 : Phosphoric 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.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 - Dispose of contents and container to an approved waste disposal plant.

Child-resistant fastening : Applicable

Tactile warning : Applicable

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with UK REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP at a concentration equal to or greater than 0,1 %

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)
Water	CAS-No.: 7732-18-5 EC-No.: 231-791-2	≥ 75 – < 90	Not classified
Phosphoric acid	CAS-No.: 7664-38-2 EC-No.: 231-633-2 REACH-no: 01-2119485924-24	≥ 5 – < 7	Acute Tox. 4 (Oral), H302 (ATE=301 mg/kg bodyweight) Skin Corr. 1B, H314
Alcohols, C9-11, branched and linear, ethoxylated (>5-10 EO)	CAS-No.: 160901-09-7 EC-No.: 500-446-0	≥ 2 – < 5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Irrit. 2, H319
Sulphamidic acid; sulphamic acid; sulfamic acid	CAS-No.: 5329-14-6 EC-No.: 226-218-8 REACH-no: 01-2119488633-28	≥ 1 – < 2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412
D-gluconic acid	CAS-No.: 526-95-4 EC-No.: 208-401-4 REACH-no: 01-2119454394-36	≥ 1 – < 2	Not classified

Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
N,N-dimethyltetradecylamine N-oxide	CAS-No.: 3332-27-2 EC-No.: 222-059-3 REACH-no: 01-2119949262-37	≥ 0.1 – < 1	Acute Tox. 4 (Oral), H302 (ATE=1064 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 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.

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 effects, 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 : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Explosion hazard : Intense heat may cause container to burst.

Hazardous decomposition products in case of fire : Thermal decomposition generates : Carbon dioxide. Carbon monoxide. Sulphur oxides. Phosphorus oxides. Nitrogen oxides. Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Runoff from fire control or dilution water may cause pollution.

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : 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. Evacuate area. 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.

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Do not touch or walk on the spilled product. 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. Avoid the spillage or runoff entering drains, sewers or watercourses. Notify authorities if product enters sewers or public waters.

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. Dilute spills with water and mop up. Move containers from spill area. 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.

Other information : 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".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe mist, vapours. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Store in a dry place. Store locked up.

Incompatible materials : Bases. Metals.

Storage temperature : > 0 – < 30 °C

Heat and ignition sources : Keep away from heat and direct sunlight.

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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Phosphoric acid (7664-38-2)	
United Kingdom - Occupational Exposure Limits	
Local name	Orthophosphoric acid
WEL TWA (OEL TWA)	1 mg/m³
WEL STEL (OEL STEL)	2 mg/m³
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:
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment - Report preview:
Safety glasses. Gloves. Protective clothing. Wear foot protection.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection - Report preview:
Safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses with side shields	Droplet		EN 166

8.2.2.2. Skin protection

Skin and body protection - Report preview:
Wear suitable protective clothing

Skin and body protection	
Type	**Standard**
Long sleeved protective clothing	

Skin and body protection	
Type	**Standard**
Chemical resistant safety shoes	EN ISO 20345

Hand protection - Report preview:
Protective gloves

Hand protection					
Type	**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 - Report preview:
In case of insufficient ventilation, wear suitable respiratory equipment

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:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	light yellow.
Odour	:	Not available
Odour threshold	:	Not available
Melting point	:	0 °C
Freezing point	:	< 0 °C
Boiling point	:	82.5 °C
Flammability	:	Non flammable.
Explosive limits	:	Not available
Flash point	:	Not available Not sustained combustibility
Auto-ignition temperature	:	365 °C
Decomposition temperature	:	Not available
pH	:	0.7 – 1.7
pH solution concentration	:	100 %
Viscosity, kinematic	:	Not available
Viscosity, dynamic	:	157 mPa·s at room temperature
Solubility	:	Soluble in the following materials: cold water and hot water. Diethyl ether. Acetone. Partially soluble. Methanol.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	1.013 – 1.023
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

Water (7732-18-5)	
Boiling point	100 °C
Vapour pressure	2300 Pa 25°C

D-gluconic acid (526-95-4)	
Boiling point	673.6 °C
Flash point	> 200 °C

Alcohols, C9-11, branched and linear, ethoxylated (>5-10 EO) (160901-09-7)	
Boiling point	260 °C Remarks on result: 'other:'
Flash point	150 °C Supplier Safety Data Sheet
Vapour pressure	117 Pa Temp.: 20 °C Remarks on result: 'other:'

Phosphoric acid (7664-38-2)	
Boiling point	296.5 °C
Vapour pressure	< 0.001 Pa 25°C

Sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)	
Vapour pressure	0.78 Pa 25°C

N,N-dimethyltetradecylamine N-oxide (3332-27-2)	
Boiling point	449.8 °C
Vapour pressure	≈ 0.00000667 Pa Temp.: 25 °C Remarks on result: 'other:'

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Not sustained combustibility : Yes

9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1) : 1.7

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Alkalines. Metals.

10.6. Hazardous decomposition products

Attacks many metals forming flammable/explosive gas (HYDROGEN!).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Conclusive but not sufficient for classification)
Acute toxicity (dermal) : Not classified (Conclusive but not sufficient for classification)
Acute toxicity (inhalation) : Not classified (Conclusive but not sufficient for classification)

Water (7732-18-5)	
LD50 oral rat	90000 mg/kg
LD50 oral	> 90000 mg/kg bodyweight
LD50 dermal	> 90000 mg/kg bodyweight
ATE GB CLP (oral)	90000 mg/kg bodyweight

D-gluconic acid (526-95-4)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Alcohols, C9-11, branched and linear, ethoxylated (>5-10 EO) (160901-09-7)	
LD50 oral rat	< 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 1.6 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:
ATE GB CLP (oral)	500 mg/kg bodyweight

Phosphoric acid (7664-38-2)	
LD50 oral rat	1.25 g/kg
LD50 oral	301 mg/kg
LD50 dermal rabbit	2740 mg/kg Source: ECHA
ATE GB CLP (oral)	301 mg/kg bodyweight
ATE GB CLP (dermal)	2740 mg/kg bodyweight

Sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)	
LD50 oral rat	2140 mg/kg bodyweight Animal: rat, Animal sex: female, Remarks on results: other:
LD50 oral	> 2000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	> 2000 mg/kg bodyweight

N,N-dimethyltetradecylamine N-oxide (3332-27-2)	
LD50 oral rat	1064 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE GB CLP (oral)	1064 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns.
pH: 0.7 – 1.7

Water (7732-18-5)	
pH	7

Alcohols, C9-11, branched and linear, ethoxylated (>5-10 EO) (160901-09-7)	
pH	5 – 7 In aqueous medium : Concentration (%) = 1

N,N-dimethyltetradecylamine N-oxide (3332-27-2)	
pH	7 – 9

Serious eye damage/irritation : Causes serious eye damage.
pH: 0.7 – 1.7

Water (7732-18-5)	
pH	7

Alcohols, C9-11, branched and linear, ethoxylated (>5-10 EO) (160901-09-7)	
pH	5 – 7 In aqueous medium : Concentration (%) = 1

N,N-dimethyltetradecylamine N-oxide (3332-27-2)	
pH	7 – 9

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)

Sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)	
NOAEL (animal/female, F1)	500 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EPA OPP 83-4 (Reproduction and Fertility Effects)

STOT-single exposure : Not classified (Conclusive but not sufficient for classification)
STOT-repeated exposure : Not classified (Conclusive but not sufficient for classification)

Alcohols, C9-11, branched and linear, ethoxylated (>5-10 EO) (160901-09-7)	
NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

N,N-dimethyltetradecylamine N-oxide (3332-27-2)	
NOAEL (oral, rat, 90 days)	40 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard : Not classified (Conclusive but not sufficient for classification)

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short–term (acute) : Not classified (Conclusive but not sufficient for classification)

Hazardous to the aquatic environment, long–term (chronic) : Not classified (Conclusive but not sufficient for classification)

D-gluconic acid (526-95-4)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	> 1000 mg/l Source: OECD Screening Information Data Set

Alcohols, C9-11, branched and linear, ethoxylated (>5-10 EO) (160901-09-7)	
LC50 - Fish [1]	5 – 7 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	2.5 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	1.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

Phosphoric acid (7664-38-2)	
LC50 - Fish [1]	75.1 mg/l Source: ECHA
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

Sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)	
LC50 - Fish [1]	70.3 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	71.6 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	71.6 mg/l waterflea
EC50 - Other aquatic organisms [2]	29.5 mg/l
EC50 72h - Algae [1]	48 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	33.8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	34 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	19 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 60 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'

N,N-dimethyltetradecylamine N-oxide (3332-27-2)	
LC50 - Fish [1]	2.67 mg/l
EC50 - Crustacea [1]	3.1 mg/l
ErC50 algae	0.19 mg/l
NOEC (chronic)	0.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.42 mg/l Test organisms (species): Pimephales promelas Duration: '302 d'

12.2. Persistence and degradability

HG limescale remover foam spray	
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.

Water (7732-18-5)	
Persistence and degradability	Rapidly degradable

D-gluconic acid (526-95-4)	
Persistence and degradability	Rapidly degradable

Alcohols, C9-11, branched and linear, ethoxylated (>5-10 EO) (160901-09-7)	
Persistence and degradability	Rapidly degradable
Biodegradation	81.4 % (OECD 301F method)

Phosphoric acid (7664-38-2)	
Persistence and degradability	Rapidly degradable

Sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)	
Persistence and degradability	Rapidly degradable

N,N-dimethyltetradecylamine N-oxide (3332-27-2)	
Persistence and degradability	Rapidly degradable
Biodegradation	80 % (OECD 310 method)

12.3. Bioaccumulative potential

HG limescale remover foam spray	
Bioaccumulative potential	Low bioaccumulation potential.

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

D-gluconic acid (526-95-4)	
Partition coefficient n-octanol/water (Log Pow)	-1.87

Phosphoric acid (7664-38-2)	
Partition coefficient n-octanol/water (Log Pow)	-0.77

Sulphamidic acid; sulphamic acid; sulfamic acid (5329-14-6)	
Partition coefficient n-octanol/water (Log Pow)	-4.34

N,N-dimethyltetradecylamine N-oxide (3332-27-2)	
Partition coefficient n-octanol/water (Log Pow)	2.7

12.4. Mobility in soil

HG limescale remover foam spray	
Ecology - soil	Expected to be highly mobile in soil.

N,N-dimethyltetradecylamine N-oxide (3332-27-2)	
Mobility in soil	3.99 Source: Quantitative Structure Activity Relation

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Dispose of in accordance with relevant local regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations. Do not flush down sewers.

Product/Packaging disposal recommendations : Empty containers retain product residue and can be hazardous. Do not dispose of the packaging without first carrying out the necessary cleaning. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. Disposal must be done according to official regulations.

Additional information : Do not re-use empty containers.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3265	UN 3265	UN 3265	UN 3265	UN 3265
14.2. UN proper shipping name				
CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Phosphoric acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Phosphoric acid)	Corrosive liquid, acidic, organic, n.o.s. (CONTAINS : Phosphoric acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Phosphoric acid)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Phosphoric acid)
Transport document description				
UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Phosphoric acid), 8, III, (E)	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Phosphoric acid), 8, III	UN 3265 Corrosive liquid, acidic, organic, n.o.s. (CONTAINS : Phosphoric acid), 8, III	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Phosphoric acid), 8, III	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Phosphoric acid), 8, III
14.3. Transport hazard class(es)				
8	8	8	8	8
				

ADR	IMDG	IATA	ADN	RID
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Dangerous for the environment	Dangerous for the environment: Dangerous for the environment Marine pollutant: No	Dangerous for the environment: Dangerous for the environment	Dangerous for the environment: Dangerous for the environment	Dangerous for the environment: Dangerous for the environment
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	C3
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T7
Portable tank and bulk container special provisions (ADR)	:	TP1, TP28
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Hazard identification number (Kemler No.)	:	80
Orange plates	:	
Tunnel restriction code (ADR)	:	E
EAC code	:	2X

Transport by sea

Special provisions (IMDG)	:	223, 274
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001, LP01
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T7
Tank special provisions (IMDG)	:	TP1, TP28
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	A
Stowage and handling (IMDG)	:	SW2
Segregation (IMDG)	:	SGG1, SG36, SG49
Properties and observations (IMDG)	:	Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y841
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	852
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	856
CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A3, A803
ERG code (IATA)	:	8L

Inland waterway transport

Classification code (ADN)	:	C3
Special provisions (ADN)	:	274
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	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 (RID)	:	TP1, TP28
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

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

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Detergent Regulation (648/2004)

Allergenic fragrances > 0.01 %:
AMYL SALICYLATE
ALPHA-ISOMETHYL IONONE
ACETYLCEDRENE

Labelling of contents

Component	%
non-ionic surfactants, amphoteric surfactants	<5%

Labelling of contents	
Component	**%**
perfumes	
AMYL SALICYLATE	
ALPHA-ISOMETHYL IONONE	
ACETYLCEDRENE	

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. United Kingdom

UK REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

UK REACH Candidate List (SVHC)

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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes (UK)			
Section	**Changed item**	**Change**	**Comments**
2.2 - Label elements	Precautionary statements (CLP)	Modified	
	Revision date	Added	
5.3 - Advice for firefighters	Precautionary measures fire	Added	
7.2 - Conditions for safe storage, including any incompatibilities	Storage temperature	Modified	
6.1 - Personal precautions, protective equipment and emergency procedures	General measures	Modified	
7.2 - Conditions for safe storage, including any incompatibilities	Heat and ignition sources	Modified	
5.2 - Special hazards arising from the substance or mixture	Explosion hazard	Added	
8.2 - Exposure controls	Respiratory protection	Removed	

Indication of changes (UK)			
Section	**Changed item**	**Change**	**Comments**
8.2 - Exposure controls	Hand protection	Modified	
8.2 - Exposure controls	Eye protection	Modified	
8.2 - Exposure controls	Skin and body protection	Modified	
6.4 - Reference to other sections	Reference to other sections (8, 13)	Modified	
7.2 - Conditions for safe storage, including any incompatibilities	Storage conditions	Modified	
5.2 - Special hazards arising from the substance or mixture	Fire hazard	Removed	
9.1 - Information on basic physical and chemical properties	pH	Modified	
9.1 - Information on basic physical and chemical properties	Odour	Removed	
	Brand door broei	Added	
	Proper Shipping Name - Addition (ADR)	Modified	
9.1 - Information on basic physical and chemical properties	Relative density	Modified	

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

Abbreviations and acronyms:	
IARC	International Agency for Research on Cancer
IATA	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
PBT	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
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Training advice : 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.

Other information : 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 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
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

Full text of H- and EUH-statements:	
H290	May be corrosive to metals.
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.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2

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.