Bruine Gele Aanslagverwijderaar

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 22-2-2017 Revision date: 20-6-2024 Supersedes version of: 12-7-2022 Version: 3.1

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	Bruine Gele Aanslagverwijderaar
UFI	:	W81P-DNDM-G301-FSUQ
Product code	:	272447
Type of product	:	Detergent
Product group	:	Cleaning product

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

Relevant identified uses

Main use category	:	Professional use
Industrial/Professional use spec	:	Wide dispersive use
Use of the substance/mixture	:	The information given in this MSDS concerns the product and is given on the assumption mentioned in section 1.1, that the product will be used in the manner and for the purposes indicated by the manufacturer.
Use of the substance/mixture	:	Cleaner

1.3. Details of the supplier of the safety data sheet

Distributor
JeFo Ship Supply
Roomweg 6-B
NL 8334 NR Tuk
Nederland
T +31(0)683701219
info@jefoshipsupply.nl, www.jefoshipsupply.nl

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Corrosive to metals, Category 1	H290
Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 1, Sub-Category 1A	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

May be corrosive to metals. Causes severe skin burns and eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS05 GHS07

Signal word (CLP) : Danger.

Contains : phosphoric acid; formic acid; ammonium bifluoride; ammonium hydrogen difluoride

Hazard statements (CLP) : H290 - May be corrosive to metals.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.
P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a doctor.
P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a doctor.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.
P390 - Absorb spillage to prevent material damage.

EUH-statements : EUH210 - Safety data sheet available on request.

2.3. Other hazards

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

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 substance(s) are not 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 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
phosphoric acid substance with national workplace exposure limit(s) (IE, GB); substance with a Community workplace exposure limit	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6 REACH-no: 01-2119485924-24	25 – 50	Skin Corr. 1B, H314
formic acid substance with national workplace exposure limit(s) (IE, GB); substance with a Community workplace exposure limit	CAS-No.: 64-18-6 EC-No.: 200-579-1 EC Index-No.: 607-001-00-0 REACH-no: 01-2119491174-37	1 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1A, H314
ammonium bifluoride; ammonium hydrogen difluoride	CAS-No.: 1341-49-7 EC-No.: 215-676-4 EC Index-No.: 009-009-00-4 REACH-no: 01-2119489180-38	1 – 5	Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
benzaldehyde substance with a Community workplace exposure limit	CAS-No.: 100-52-7 EC-No.: 202-860-4 EC Index-No.: 605-012-00-5 REACH-no: 01-2119455540-44	0,01 – 0,1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 STOT SE 3, H335

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
phosphoric acid	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6 REACH-no: 01-2119485924-24	(10 ≤ C < 25) Skin Irrit. 2; H315 (10 ≤ C < 25) Eye Irrit. 2; H319 (25 ≤ C < 100) Skin Corr. 1B; H314
formic acid	CAS-No.: 64-18-6 EC-No.: 200-579-1 EC Index-No.: 607-001-00-0 REACH-no: 01-2119491174-37	(2 ≤ C < 10) Skin Irrit. 2; H315 (2 ≤ C < 10) Eye Irrit. 2; H319 (10 ≤ C < 90) Skin Corr. 1B; H314 (90 ≤ C ≤ 100) Skin Corr. 1A; H314
ammonium bifluoride; ammonium hydrogen difluoride	CAS-No.: 1341-49-7 EC-No.: 215-676-4 EC Index-No.: 009-009-00-4 REACH-no: 01-2119489180-38	(0,1 ≤ C < 1) Skin Irrit. 2; H315 (0,1 ≤ C < 1) Eye Irrit. 2; H319 (1 ≤ C ≤ 100) Skin Corr. 1B; H314

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 : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : Inhalation may cause irritation (cough, short breathing, difficulty in breathing).

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	:	Exercise caution when fighting any chemical fire.
Protection during firefighting	:	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	:	Clean up any spills as soon as possible, using an absorbent material to collect it.

For non-emergency personnel

Protective equipment	:	Wear recommended personal protective equipment.
Emergency procedures	:	Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe vapours, gas, mist, fume, spray, dust.

For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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 further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	May be corrosive to metals.
Precautions for safe handling	:	Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe vapours, gas, mist, fume, spray, dust. 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	:	Comply with applicable regulations.
Storage conditions	:	Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store in a well-ventilated place. Keep cool.
Incompatible materials	:	Metals.
Storage temperature	:	10 – 30 °C
Information on mixed storage	:	Keep in a cool place away from (strong) bases.
Storage area	:	Store in a clean, dry, fire resistant area. Ensure that there is a suitable ventilation system.
Special rules on packaging	:	Store in a closed container.
Packaging materials	:	Do not store in corrodable metal. Store always product in container of same material as original container.

7.3. Specific end use(s)

Carefully comply with the instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

phosphoric acid (7664-38-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Orthophosphoric acid
IOEL TWA	1 mg/m³
IOEL STEL	2 mg/m³
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Ireland - Occupational Exposure Limits	
Local name	Orthophosphoric acid [Phosphoric acid]
OEL TWA	1 mg/m³
OEL STEL	2 mg/m³
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
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

formic acid (64-18-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Formic acid
IOEL TWA	9 mg/m³
	5 ppm
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
Ireland - Occupational Exposure Limits	
Local name	Formic acid
OEL TWA	9 mg/m³
	5 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
United Kingdom - Occupational Exposure Limits	
Local name	Formic acid
WEL TWA (OEL TWA)	9,6 mg/m³
	5 ppm

formic acid (64-18-6)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

benzaldehyde (100-52-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	8,7 mg/m³
IOEL STEL	17,4 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Personal protection equipment

Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Wear security glasses which protect from splashes (EN ISO16321 CH)

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses	Protection for Liquid particles, Droplet	With side shields	EN ISO 16321 CH

Skin protection

Skin and body protection:
Long sleeved protective clothing (EN 14605). Wear impervious rubber safety shoes (EN ISO 20345 S7)

Skin and body protection		
Type		**Standard**
Tyvek® Gown/Coveralls		EN 14605
Safety shoes		EN ISO 20345

Hand protection:
Protective gloves

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Reusable gloves	Viton® II	6 (> 480 minutes)	0,4	2 (< 1.5)	EN ISO 374

Respiratory protection

Respiratory protection:
In case of inadequate ventilation wear respiratory protection.

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
Full face respirator	ABEK, Type P2	Vapour protection	EN 136

Environmental exposure controls

Environmental exposure controls:
Dispose of contents/container in accordance with licensed collector's sorting instructions. Carefully comply with the instructions for use. Avoid release to the environment.
Consumer exposure controls:
Keep locked up and out of the reach of children. Appropriate personal protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless.
Appearance	:	Clear.
Odour	:	perfumed.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not applicable
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	> 100 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	0,5 – 1
pH solution concentration	:	100 %
Viscosity, kinematic	:	< 15,873 mm^2/s
Viscosity, dynamic	:	< 20 mPa·s
Solubility	:	completely soluble.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	1,26 g/cm^3
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

No additional information available

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

metals.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Bruine Gele Aanslagverwijderaar	
ATE CLP (oral)	1408,55 mg/kg bodyweight

phosphoric acid (7664-38-2)	
LD50 oral	1530 mg/kg bodyweight
LD50 dermal	2740 mg/kg bodyweight

formic acid (64-18-6)	
LD50 oral rat	730 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 618 - 863
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	7,85 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

benzaldehyde (100-52-7)	
LD50 oral rat	≈ 1430 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1,33 - 1,54
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit
LC50 Inhalation - Rat	1 – 5 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)

ammonium bifluoride; ammonium hydrogen difluoride (1341-49-7)	
LD50 oral rat	130 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

Skin corrosion/irritation : Causes severe skin burns.
pH: 0,5 – 1

formic acid (64-18-6)	
pH	1

benzaldehyde (100-52-7)	
pH	5,9

Serious eye damage/irritation : Causes serious eye damage.
pH: 0,5 – 1

formic acid (64-18-6)	
pH	1

benzaldehyde (100-52-7)	
pH	5,9

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

formic acid (64-18-6)	
NOAEL (chronic, oral, animal/male, 2 years)	400 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:Effect type: toxicity (migrated information)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

formic acid (64-18-6)	
NOAEL (animal/male, F0/P)	676 mg/kg
NOAEL (animal/male, F1)	676 mg/kg

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

benzaldehyde (100-52-7)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

phosphoric acid (7664-38-2)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

formic acid (64-18-6)	
LOAEL (oral, rat, 90 days)	2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (oral, rat, 90 days)	400 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0,244 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

benzaldehyde (100-52-7)	
LOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: other:rat and mouse

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Bruine Gele Aanslagverwijderaar	
Viscosity, kinematic	< 15,873 mm²/s

11.2. Information on other hazards

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 (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long–term (chronic) : Not classified (Based on available data, the classification criteria are not met)

phosphoric acid (7664-38-2)	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	> 100 mg/l waterflea
EC50 - Other aquatic organisms [2]	> 100 mg/l
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

formic acid (64-18-6)	
LC50 - Fish [1]	130 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	365 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [2]	26,9 mg/l
EC50 72h - Algae [1]	1240 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	> 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

benzaldehyde (100-52-7)	
LC50 - Fish [1]	1,07 mg/l
EC50 - Other aquatic organisms [1]	23,7 mg/l waterflea
NOEC chronic fish	0,12 mg/l Test organisms (species): Pimephales promelas Duration: '7 d'

ammonium bifluoride; ammonium hydrogen difluoride (1341-49-7)	
LC50 - Fish [1]	421,4 mg/l Test organisms (species): no data
EC50 - Crustacea [1]	26 mg/l
EC50 96h - Algae [1]	43 mg/l
NOEC chronic fish	1,2 mg/l Test organisms (species): Oncorhynchus gorbuscha Duration: '61 d'
NOEC chronic crustacea	8,9 mg/l

12.2. Persistence and degradability

Bruine Gele Aanslagverwijderaar	
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.

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

formic acid (64-18-6)	
Persistence and degradability	Rapidly degradable

benzaldehyde (100-52-7)	
Persistence and degradability	Rapidly degradable

ammonium bifluoride; ammonium hydrogen difluoride (1341-49-7)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

phosphoric acid (7664-38-2)	
Partition coefficient n-octanol/water (Log Pow)	-0,77

formic acid (64-18-6)	
Partition coefficient n-octanol/water (Log Pow)	-2,1

benzaldehyde (100-52-7)	
Partition coefficient n-octanol/water (Log Pow)	1,48

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers can be dumped after cleaning according to local legislation. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.
Ecological waste information : Avoid release to the environment.
European List of Waste (LoW, EC 2000/532) : 20 01 29* - detergents containing dangerous substances
HP Code : HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.
HP8 - "Corrosive:" waste which on application can cause skin corrosion.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3264	UN 3264	UN 3264	UN 3264	UN 3264
14.2. UN proper shipping name				
CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ; formic acid ; ammonium bifluoride; ammonium hydrogen difluoride)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ; formic acid ; ammonium bifluoride; ammonium hydrogen difluoride)	Corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid ; formic acid ; ammonium bifluoride; ammonium hydrogen difluoride)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ; formic acid ; ammonium bifluoride; ammonium hydrogen difluoride)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ; formic acid ; ammonium bifluoride; ammonium hydrogen difluoride)
Transport document description				
UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ; formic acid ; ammonium bifluoride; ammonium hydrogen difluoride), 8, III, (E)	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ; formic acid ; ammonium bifluoride; ammonium hydrogen difluoride), 8, III	UN 3264 Corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid ; formic acid ; ammonium bifluoride; ammonium hydrogen difluoride), 8, III	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ; formic acid ; ammonium bifluoride; ammonium hydrogen difluoride), 8, III	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid ; formic acid ; ammonium bifluoride; ammonium hydrogen difluoride), 8, III

ADR	IMDG	IATA	ADN	RID
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-A EmS-No. (Spillage): S-B	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	C1
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
APP code	:	B

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
Stowage category (IMDG)	:	A
Stowage and handling (IMDG)	:	SW2
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
ERG code (IATA)	:	8L

Inland waterway transport

Classification code (ADN)	:	C1
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)	:	C1
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. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

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

REACH Annex XIV (Authorisation List)

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

REACH Candidate List (SVHC)

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

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 substance(s) listed on 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: Ammonium hydrogen fluoride or ammonium bifluoride (1341-49-7)

Detergent Regulation (648/2004)

Allergenic fragrances > 0.01 %:
Benzaldehyde

Labelling of contents	
Component	**%**
phosphates	≥30%
anionic surfactants	<5%
perfumes	
Benzaldehyde	

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)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes		
Section	**Changed item**	**Comments**
	Supersedes	**Modified**
	Revision date	**Modified**
1.1	UFI on SDS 1.1	**Added**
1.2	Function or use category	**Removed**
1.2	Use of the substance/mixture	**Modified**
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	**Modified**
2.2	Hazard pictograms (CLP)	**Modified**
2.2	Precautionary statements (CLP)	**Modified**
2.2	Hazard statements (CLP)	**Modified**
8.2	Appropriate engineering controls	**Modified**
8.2	Eye protection	**Modified**
8.2	Skin and body protection	**Modified**
9	Concentration of the solution used for the pH measurement	**Added**
11.1	ATE CLP (oral)	**Added**

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

Abbreviations and acronyms:	
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
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
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
EC-No.	European Community number
EN	European Standard
OEL	Occupational Exposure Limit
ThOD	Theoretical oxygen demand (ThOD)
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
ED	Endocrine disruptor

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

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. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
EUH210	Safety data sheet available on request.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H290	May be corrosive to metals.
H301	Toxic if swallowed.
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.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Met. Corr. 1	H290	Expert judgement
Acute Tox. 4 (Oral)	H302	Calculation method
Skin Corr. 1A	H314	Expert judgement
Eye Dam. 1	H318	On basis of test data

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.