KRUPPS
KLEAN LAB
SANI EXTRA

Safety Data Sheet dated 24/10/2018, version 2
Print date: 24/10/2018

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

1.1. Product identifier

Mixture identification:

Trade name: SANI EXTRA

Product category: Detergent

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

Recommended use:

Detergent for the food industry. For CIP washing and for semi-closed systems washing.

Descaling

Acid cleaner

For professional use

Uses advised against:

This product is not recommended for any use or industry of industrial, professional or consumer use other than those mentioned above.

1.3. Details of the supplier of the safety data sheet

-Company:

KRUPPS SRL

VIA AUSTRIA, 19

35127 PADOVA (PD)

-Competent person responsible for the safety data sheet:

krupps@krupps.it

1.4. Emergency telephone number

KRUPPS SRL tel +39 0497625156 fax +39 0498704701

CAV and Toxicology ASST Papa Giovanni XXIII di Bergamo – Tel: 800 883300

CAV Niguarda Cà Granda– Milano – Tel: +39 02/66101029

CAV Azienda ospedaliera “S.G. Battista” Torino – Tel: +39 011/6637637

CAV of Pavia – Tel: +39 0382/24444

CAV Gaslini of Genova – Tel: +39 010/5636245

CAV Azienda Ospedaliera Careggi of Firenze – Tel: +39 055/4277238

CAV Policlinico A.Gemelli of Rome – Tel: +39 06/3054343

CAV La Sapienza of Rome - Tel: +39 06/49970698

CAV Cardarelli of Napoli – Tel: +39 081/7472870

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- Warning, Met. Corr. 1, May be corrosive to metals.
- Warning, Acute Tox. 4, Harmful if swallowed.
- Danger, Skin Corr. 1B, Causes severe skin burns and eye damage.
- Danger, Eye Dam. 1, Causes serious eye damage.
- Warning, STOT SE 3, May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements
Hazard pictograms:

Danger
Hazard statements:
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
Precautionary statements:
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash ... Thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P310 Immediately call a POISON CENTER/doctor/...
Special Provisions:
None
Contains
methanesulphonic acid
hydrogen peroxide
Special provisions according to Annex XVII of REACH and subsequent amendments:
None

Contains (EC Regulation 648/2004) :
Oxygen-based whiteners: >= 5 - <15%
Non-ionic surfactants: < 5%

2.3. Other hazards
vPvB Substances: None - PBT Substances: None
Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.
3.2. Mixtures
Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 15% - < 20%	methanesulphonic acid	Index number: 607-145-00-4 CAS: 75-75-2 EC: 200-898-6 REACH No.: 01-2119491166-34-xxxx	2.16/1 Met. Corr. 1 H290 3.1/4/Dermal Acute Tox. 4 H312 3.1/4/Oral Acute Tox. 4 H302 3.2/1B Skin Corr. 1B H314 3.3/1 Eye Dam. 1 H318 3.8/3 STOT SE 3 H335
>= 7% - < 10%	hydrogen peroxide	Index number: 008-003-00-9 CAS: 7722-84-1 EC: 231-765-0 REACH No.: 01-2119485845-22-XXXX	2.13/1 Ox. Liq. 1 H271 3.1/4/Inhal Acute Tox. 4 H332 3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 3.8/3 STOT SE 3 H335 Specific Concentration Limits: 8% <= C < 50%: Eye Dam. 1 H318 C >= 35%: STOT SE 3 H335 C >= 63%: Aquatic Chronic 3 H412 C >= 70%: Ox. Liq. 1 H271 C >= 70%: Skin Corr. 1A H314
>= 1% - < 3%	Alcohols, C12-18, ethers with polyethylene glycol mono-Bu ether	CAS: 146340-16-1	3.2/2 Skin Irrit. 2 H315 4.1/A1 Aquatic Acute 1 H400 4.1/C3 Aquatic Chronic 3 H412

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

Give nothing to eat or drink.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation produces burning sensation, coughing, difficulty in breathing, nausea and sore throat.
Skin contact may cause severe redness, chemical burns, malaise or local pain.
Eye contact produces redness, pain, severe deep burns and loss of vision.
If swallowed, cause severe burns to the lips, mouth, throat and esophagus, with gastric disorders and abdominal pain.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
In case of inhalation: Ventilate the environment. Immediately remove the patient from the contaminated environment and keep it in a well-ventilated place. In case of illness consult a doctor.
In case of ingestion: rinse mouth with water. To carry the injured person in the open air and keep him resting in a position favorable to breathing. Consult a physician if symptoms occur.
In case of contact with eyes: Wash with plenty of water for at least 10 minutes. Consult a doctor if symptoms occur.
In case of skin contact: Rinse with plenty of water for at least 15 minutes and remove from the reach of children
clothing and footwear that may have been in contact with the product. Consult a physician if symptoms are present.
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water.
Carbon dioxide (CO_2).
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:
Wear personal protection equipment.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.

See protective measures under point 7 and 8.
For emergency responders:
Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Use localized ventilation system.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry and well-maintained place. Avoid extreme storage temperatures. Avoid exposure to direct sunlight.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

hydrogen peroxide - CAS: 7722-84-1

ACGIH - TWA(8h): 1 ppm - Notes: A3 - Eye, URT, and skin irr

DNEL Exposure Limit Values

methanesulphonic acid - CAS: 75-75-2

Consumer: 0.42 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term (repeated)
Worker Industry: 19.44 mg/Kg bw/day - Worker Professional: 19.44 mg/Kg bw/day - Consumer: 8.33 mg/Kg bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects (repeated)

Worker Industry: 6.76 mg/m3 - Worker Professional: 6.76 mg/m3 - Consumer: 1.44 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects (repeated)
Consumer: 8.33 mg/Kg bw/day - Exposure: Human Oral - Frequency: Long Term, systemic effects (repeated)
Worker Industry: 0.7 mg/m3 - Worker Professional: 0.7 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects

hydrogen peroxide - CAS: 7722-84-1

Worker Professional: 3.0 mg/m3 - Consumer: 1.93 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects
Worker Professional: 1.4 mg/m3 - Consumer: 0.21 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

PNEC Exposure Limit Values

methanesulphonic acid - CAS: 75-75-2

Target: Fresh Water - Value: 0.01 mg/l
Target: Marine water - Value: 0.001 mg/l
Target: Water, intermittent release - Value: 0.12 mg/l
Target: Freshwater sediments - Value: 0.044 mg/Kg (dry weight)
Target: Marine water sediments - Value: 0.004 mg/Kg (dry weight)
Target: Soil (agricultural) - Value: 0.00 mg/Kg (dry weight)
Target: sewage treatment plant (STP) - Value: 100 mg/l

hydrogen peroxide - CAS: 7722-84-1

Target: Fresh Water - Value: 0.0126 mg/l
Target: Marine water - Value: 0.0126 mg/l
Target: Water, intermittent release - Value: 0.0138 mg/l
Target: sewage treatment plant (STP) - Value: 4.66 mg/l
Target: Freshwater sediments - Value: 0.47 mg/Kg (dry weight)
Target: Marine water sediments - Value: 0.47 mg/Kg (dry weight)
Target: Soil (agricultural) - Value: 0.0023 mg/Kg (dry weight)

8.2. Exposure controls

Eye protection:

If there is a risk of exposure to splashes and / or splashes, provide adequate protection with lateral protection hermetic goggles (EN 166).
Do not use contact lenses

Protection for skin:

Wear workwear with long sleeves and safety footwear for professional use of category II (Ref. 89/686 / EEC and ISO 20344). Wash with soap and water after removing protective clothing.
Wear clothing that offers extensive protection to the skin, for example. cotton,
Rubber, PVC or viton.
Wear garments resistant to corrosive products.

Protection for hands:

When handling the pure product, use chemical resistant gloves (EN374-1 / EN374-2 / EN374-3).
Suitable materials: Nitrile rubber permeation time:> 480 min Keep manufacturer's information relevant to permeability, time of penetration and working conditions (mechanical stress, contact life).

Respiratory protection:

Provide adequate ventilation. Respiratory system only in the presence of aerosols or vapors. The use of respiratory protection means is necessary if the technical measures taken are not sufficient to limit worker exposure to the recommended thresholds. The respiratory protection provided by masks is, however, limited.
If the substance considered to be odorless or the olfactory threshold is greater than the relative TLV-TWA value and / or in case of emergency, use an open-air compressed-air breathing apparatus (EN 137) or a breathing apparatus of external air (EN 138).
Refer to EN 529 for the correct choice of respiratory protective device.

Thermal Hazards:

None

Environmental exposure controls:

Emissions from production processes, including those from ventilation equipment, should be checked for compliance with environmental protection legislation.
Product residues should not be unloaded unchecked in drains or in watercourses.

Appropriate engineering controls:

Ensure adequate ventilation, especially in closed areas.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Clear liquid, colourless	--	--
Odour:	Characteristic	--	--
Odour threshold:	Not available	--	--
pH:	<1.5	--	--
Melting point / freezing point:	Not available	--	--
Initial boiling point and boiling range:	Not available	--	--
Flash point:	>100 °C	--	--
Evaporation rate:	Not available	--	--
Solid/gas flammability:	Not applicable	--	--
Upper/lower flammability or explosive limits:	Not available	--	--
Vapour pressure:	Not available	--	--

Vapour density:	Not available	--	--
Relative density:	1.10 kg/l	--	--
Solubility in water:	Miscible	--	--
Solubility in oil:	Insoluble	--	--
Partition coefficient (n-octanol/water):	Not available	--	--
Auto-ignition temperature:	Not available	--	--
Decomposition temperature:	Not available	--	--
Viscosity:	Not available	--	--
Explosive properties:	Not available	--	--
Oxidizing properties:	Not oxidant	--	--

9.2. Other information

Properties	**Value**	**Method:**	**Notes:**
Miscibility:	In Water	--	--
Fat Solubility:	Not available	--	--
Conductivity:	Not available	--	--
Substance Groups relevant properties	Not available	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

It may generate flammable gases on contact with dithiocarbamates, elementary metals (alkalis, alkaline earth, powder alloys or vapours) nitrides, and powerful reducing agents.
It may generate toxic gases on contact with dithiocarbamates, inorganic fluorides, inorganic sulphides, and powerful oxidising agents.
It may catch fire on contact with elementary metals (alkalis and alkaline earth).

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

SANI EXTRA

a) acute toxicity

The product is classified: Acute Tox. 4 H302

ATEmix - Oral 2391,92 mg/kg

ATEmix - Dermal 6211,24 mg/kg

ATEmix - Inhalation (Vapours) 129,412 mg/l

b) skin corrosion/irritation

The product is classified: Skin Corr. 1B H314

c) serious eye damage/irritation

The product is classified: Eye Dam. 1 H318

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

The product is classified: STOT SE 3 H335

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

methanesulphonic acid - CAS: 75-75-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 3 649 mg/kg - Notes: OCSE 401

Test: LD50 - Route: Skin - Species: Rabbit > 1000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 200-2000 mg/kg - Notes: OECD 402

Test: CL0 - Route: Inhalation - Species: Mouse > 1.88 mg/m3 - Duration: 1h

Test: NOAEL(C) - Route: Oral - Species: Rat >= 1805 mg/kg bw/day

Test: NOAEL(C) - Route: Inhalation - Species: Rat < 0.026 mg/l

Test: NOAEL(C) - Route: Inhalation - Species: Rat = 0.242 mg/l

b) skin corrosion/irritation:
Test: Causes serious burns. - Route: Skin Positive
c) serious eye damage/irritation:
Test: Causes Serious eye damage - Route: Eyes Positive
d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin - Species: Porcellino d'India Negative - Notes: OECD 406
e) germ cell mutagenicity:
Test: Ames test Negative
g) reproductive toxicity:
Test: NOAEL - Route: invivo - Species: Rat >= 400 mg/kg bw/day - Notes: OECD 414
Test: NOAEL(C) - Route: invivo - Species: Rat >= 1000 mg/kg bw/day - Notes: OECD 421
hydrogen peroxide - CAS: 7722-84-1
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 500 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat = 2 mg/l - Duration: 4h - Source: Kondrashov VA 1977 (ECHA)
Alcohols, C12-18, ethers with polyethylene glycol mono-Bu ether - CAS: 146340-16-1
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Notes: OECD Guideline 401
b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin - Species: Rat Positive
c) serious eye damage/irritation:
Test: Eye Irritant - Route: Eyes - Species: Rat Negative
d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin - Species: Porcellino d'India Negative - Notes: OECD Guideline 406
e) germ cell mutagenicity:
Test: Ames test - Route: In vitro - Species: Generic Bacteria Negative - Notes: OECD Guideline 471

SECTION 12: Ecological information

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.

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
SANI EXTRA
Not classified for environmental hazards
Based on available data, the classification criteria are not met
methanesulphonic acid - CAS: 75-75-2
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Oncorhynchus Mykiss = 73 mg/l - Duration h: 96 - Notes:

OECD 203
Endpoint: EC50 - Species: Daphnia Magna = 70 mg/l - Duration h: 48 - Notes: OECD 202
Endpoint: EC50 - Species: P1 = 12-24 mg/l - Duration h: 72 - Notes: OECD 201
c) Bacteria toxicity:
Endpoint: EC50 - Species: activated sludge > 1000 mg/l - Duration h: 0.5
hydrogen peroxide - CAS: 7722-84-1
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Pimephales promelas = 16.4 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 2.4 mg/l - Duration h: 48
Endpoint: NOEC - Species: Skeletonema costatum = 0.63 mg/l - Duration h: 72
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Daphnia Magna = 0.63 mg/l - Notes: 21 days
c) Bacteria toxicity:
Endpoint: EC50 - Species: activated sludge = 466 mg/l - Duration h: 0.5 - Notes: OECD TG 209
Endpoint: EC50 - Species: activated sludge > 1000 mg/l - Duration h: 3 - Notes: OECD TG 209
Alcohols, C12-18, ethers with polyethylene glycol mono-Bu ether - CAS: 146340-16-1
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Leuciscus idus > 0.1-1 mg/l - Duration h: 48 - Notes: DIN 38412 parte 15
Endpoint: EC50 - Species: Daphnia Magna > 0.1-1 mg/l - Duration h: 24 - Notes: OECD Guideline 202, part.1
Endpoint: EC50 - Species: Algae > 0.1-1 mg/l - Duration h: 72 - Notes: OECD Guideline 201
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Daphnia Magna > 0.1-1 mg/l - Notes: 21 days - OECD Guideline 202, part.2
c) Bacteria toxicity:
Endpoint: EC0 - Species: activated sludge > 10-100 mg/l - Notes: OECD Guideline 209

12.2. Persistence and degradability

None
SANI EXTRA
Biodegradability: Easily biodegradable - Test: --- - Duration: ------%: - - Notes: -
methanesulphonic acid - CAS: 75-75-2
Biodegradability: Easily biodegradable - Test: DOC reduction (OECD 301 A (new version)) - Duration: 28 days - %: 90-100
hydrogen peroxide - CAS: 7722-84-1
Biodegradability: Easily biodegradable - Test: Biodegradation - Duration: 20 h - %: 50
Alcohols, C12-18, ethers with polyethylene glycol mono-Bu ether - CAS: 146340-16-1
Biodegradability: Easily biodegradable - Test: OECD 301/D - Duration: 28 days - %: 70

12.3. Bioaccumulative potential

SANI EXTRA
Bioaccumulation: Unlikely - Test: --- - - Duration: ---
methanesulphonic acid - CAS: 75-75-2
Bioaccumulation: Unlikely - Test: --- - - Duration: ---
hydrogen peroxide - CAS: 7722-84-1

Bioaccumulation: Not bioaccumulative - Test: --- --- - Duration: ---

Alcohols, C12-18, ethers with polyethylene glycol mono-Bu ether - CAS: 146340-16-1

Bioaccumulation: Unlikely - Test: --- --- - Duration: ---

12.4. Mobility in soil

SANI EXTRA

Mobility in soil: No data available - Test: --- - - Duration: ---

methanesulphonic acid - CAS: 75-75-2

Mobility in soil: High mobility potential in soil - Test: --- - - Duration: ---

hydrogen peroxide - CAS: 7722-84-1

Mobility in soil: No data available - Test: --- --- - Duration: ---

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

CONATMINATED PACKAGING:

Contaminated packaging should be sent to recovery or disposal in accordance with national waste management regulations.

Since empty containers can store product residues, follow the warnings on the label even after emptying the container.

Fully emptied and clean packaging can be recycled.

Do not remove the packaging labels until they have been cleaned.

SECTION 14: Transport information

14.1. UN number

ADR-UN Number:	3265
IATA-UN Number:	3265
IMDG-UN Number:	3265

14.2. UN proper shipping name

ADR-Shipping Name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (methanesulphonic acid, 1-Hydroxyethylidene-1,1-Diphosphonic Acid (HEDP))
IATA-Shipping Name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (methanesulphonic acid, 1-Hydroxyethylidene-1,1-Diphosphonic Acid (HEDP))
IMDG-Shipping Name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

(methanesulphonic acid, 1-Hydroxyethylidene- 1,1-Diphosphonic Acid (HEDP))

14.3. Transport hazard class(es)

ADR-Class:	8
ADR - Hazard identification number:	80
IATA-Class:	8
IATA-Label:	8
IMDG-Class:	8

14.4. Packing group

ADR-Packing Group:	II
IATA-Packing group:	II
IMDG-Packing group:	II

14.5. Environmental hazards

ADR-Enviromental Pollutant:	No
IMDG-Marine pollutant:	No

14.6. Special precautions for user

ADR-Subsidiary risks:	-
ADR-S.P.:	274

ADR-Transport category (Tunnel restriction code): 2 (E)

IATA-Passenger Aircraft:	851
IATA-Subsidiary risks:	-
IATA-Cargo Aircraft:	855
IATA-S.P.:	A3 A803
IATA-ERG:	8L
IMDG-EmS:	F-A , S-B
IMDG-Subsidiary risks:	-
IMDG-Stowage and handling:	Category B SW2
IMDG-Segregation:	-

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

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

EU Biocidal Regulation no. 528/2012 (BPR)
Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H290 May be corrosive to metals.
H312 Harmful in contact with skin.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H271 May cause fire or explosion; strong oxidiser.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H412 Harmful to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.

Hazard class and hazard category	Code	Description
Ox. Liq. 1	2.13/1	Oxidising liquid, Category 1
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A

Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Met. Corr. 1, H290	On basis of test data
Acute Tox. 4, H302	Calculation method
Skin Corr. 1B, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)
STOT SE 3, H335	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate
ATEmix: Acute toxicity Estimate (Mixtures)
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CLP: Classification, Labeling, Packaging.

DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.