KRUPPS KLEAN LAB

KLEAN DET XP

Safety Data Sheet dated 22/5/2018, version 3
Print date: 18/6/2019

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

1.1. Product identifier

Mixture identification:

Trade name: KLEAN DET XP

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

Recommended use:

For professional use

Product for washing dishes. For Automatic Process.

Alkaline detergent

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 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.

Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.

Danger, Eye Dam. 1, Causes serious eye damage.


Warning, STOT RE 2, May cause damage to organs through prolonged or repeated exposure.

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.
H314 Causes severe skin burns and eye damage.
H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements:
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/...
P314 Get medical advice/attention if you feel unwell.
P390 Absorb spillage to prevent material damage.
Special Provisions:
None
Contains
tetrasodium ethylene diamine tetraacetate
Sodium Hydroxide
Special provisions according to Annex XVII of REACH and subsequent amendments:
None

Contains (EC Regulation 648/2004) :
EDTA and its salts:> = 15 <30%
Phosphonates, polycarboxylates: <5%
Non-ionic surfactants: <5%
Perfume (D-Limonene, Citral)

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%	tetrasodium ethylene diamine tetraacetate	Index number: 607-428-00-2 CAS: 64-02-8 EC: 200-573-9 REACH No.: 01-21194867 62-27-xxxx	3.1/4/Inhal Acute Tox. 4 H332 3.1/4/Oral Acute Tox. 4 H302 3.3/1 Eye Dam. 1 H318 3.9/2 STOT RE 2 H373
>= 10% - < 15%	Sodium Hydroxide	Index number: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5 REACH No.: 01-21194578 92-27-XXXX	2.16/1 Met. Corr. 1 H290 3.2 /1A Skin Corr. 1A H314 3.3 /1 Eye Dam. 1 H318
>= 0.1% - < 1%	trisodium nitrilotriacetate	Index number: 607-620-00-6 CAS: 5064-31-3 EC: 225-768-6	3.1/4/Oral Acute Tox. 4 H302 3.3/2 Eye Irrit. 2 H319 3.6/2 Carc. 2 H351

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.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye contact produces redness, pain, severe deep burns and loss of vision.

The inhalation produces burning sensation, cough, headache, difficulty breathing, nausea and throat pain. Inhalation can cause pulmonary edema.

The symptoms of pulmonary edema are not seen, often, until after a few hours and become more serious with physical exertion.

It produces chemical burns in the skin, with local malaise or pain, severe redness and swelling, tissue destruction, cracking and ulceration.

Contact with the eyes produces redness, pain, severe deep burns and loss of vision.

If swallowed, it causes severe burns to the lips, mouth, throat and esophagus, with gastric disorders and abdominal pain. If ingested, it may cause severe abdominal pain, vomiting, diarrhea and collapse.

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 contact with skin: Remove contaminated clothing immediately.
Wash immediately with plenty of running water and possibly soap the areas of the body that have come into contact with the product, even if only suspect.
Consult a doctor immediately.
If swallowed, seek immediate medical attention. If you contact your mouth, rinse it only with a large amount of water. Do not induce vomiting at risk of perforation. If vomiting spontaneously arrives, keep the respiratory tract free.
In case of contact with eyes: Rinse immediately with plenty of water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue to rinse. Do not apply oils. Do not attempt to neutralize with chemicals. Get immediate medical attention, preferably by an ophthalmologist.
In caso of Inhalation: Remove the injured from the contaminated area and transport it in the open air. If there is difficulty breathing, apply oxygen. If breathing is irregular or stopped, use artificial respiration. Do not breathe mouth to mouth. In case of loss of consciousness, put in rest. If the beats disappear, apply external heartbeat. Keep it covered while waiting for the doctor.
In case of skin contact: Rinse immediately with plenty of water for 30 minutes. Remove clothing while showering. Remove the ultimate goggles so that the washing water does not come into contact with the eyes. Washing with water is the only effective method to remove the product from the skin. Do not apply oils or ointments. Proportionate medical attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water.
Carbon dioxide (CO2).
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

Wear personal protection equipment.

Remove persons to safety.
See protective measures under point 7 and 8.

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.
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

Keep away from naked flames, sparks and heat sources. Avoid exposure to direct sunlight.
Store only in the original container. Store in a cool, well-ventilated place away from sources of heat, free flames, sparks and other sources of ignition.
Recommended temperature range: min 5ºC, max 40ºC
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

Sodium Hydroxide - CAS: 1310-73-2

ACGIH - STEL: Ceiling 2 mg/m3 - Notes: URT, eye, and skin irr

DNEL Exposure Limit Values

tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8

Worker Industry: 1.5 mg/m3 - Consumer: 0.6 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 1.5 mg/m3 - Consumer: 0.6 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Industry: 3 mg/m3 - Consumer: 1.2 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 3 mg/m3 - Consumer: 1.2 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects
Consumer: 25 mg/m3 - Exposure: Human Oral - Frequency: Long Term, systemic effects

Sodium Hydroxide - CAS: 1310-73-2

Worker Industry: 1.0 mg/m3 - Consumer: 1.0 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Industry: 1.0 mg/m3 - Consumer: 1.0 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects

PNEC Exposure Limit Values

tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8

Target: Marine water - Value: 0.22 mg/l
Target: Fresh Water - Value: 2.2 mg/l
Target: Occasional issue - Value: 1.2 mg/l
Target: Soil - Value: 0.72 mg/kg - Notes:: peso a secco
Target: sewage treatment plant (STP) - Value: 43 mg/l

8.2. Exposure controls

Eye protection:

Full frame glasses (EN 166). For the risk of splashing, visor (EN 166).
If there is a risk of exposure to splashes and / or splashes, provide adequate protection with lateral protection hermetic goggles (EN 166).

Protection for skin:

Wear clothing that offers extensive protection to the skin, for example. cotton, Rubber, PVC or viton.
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 garments resistant to corrosive products.

Protection for hands:

Protect your hands with category III work gloves: Chemical Safety Gloves (EN 374).
For the final choice of material for work gloves, consider the following: compatibility, degradation, breaking time and permeation.
In the case of preparations, the resistance of chemical gloves to working gloves must be verified before use as unpredictable. The glove has a wear time depending on the mode of use and durability.

Respiratory protection:

Use respiratory protection in mists
Appropriate protection for short-term respiratory tract respiratory tract: P2-type filter (white), medium retention capacity, for irritant or harmful particles or aerosols (EN143), spillage inside: 8 %, Security factor assigned up to 10

Thermal Hazards:

Not applicable (the product is handled at room temperature).

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.
Use in accordance with good working practices, avoiding dispersing the product in the environment.

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:	Light Yellow Clear liquid	--	--
Odour:	Characteristic	--	--
Odour threshold:	Not available	--	--
pH:	12,4	--	--
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:	ca. 1.27 Kg/l	--	--
Solubility in water:	Complete	--	--
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 applicable	--	--
Oxidizing properties:	Not available	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	In all proportions in water.	--	--
Fat Solubility:	Insoluble	--	--
Conductivity:	Not available	--	--

VOC	Not available	--	--
Molecular weight	Not available	--	--
Substance Groups relevant properties	Not available	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

It can be corrosive to metals

There aren't particular dangers of reaction with other substances under normal conditions of use.

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

It may generate flammable gases on contact with halogenated organic substances, and elementary metals.

10.4. Conditions to avoid

Avoid contact with strong acids, alkalis and oxidants.

Avoid overheating. Avoid the accumulation of electrostatic charges. Avoid all sources of ignition.

Keep away from sources of heat and light.

10.5. Incompatible materials

Attacks many metals producing hydrogen (extremely flammable gas) that can form explosive mixtures with air.

Acids and Oxidants

10.6. Hazardous decomposition products

No hazardous decomposition products if they comply with the prescriptions for storage and handling.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

KLEAN DET XP

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

The product is classified: Skin Corr. 1A 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

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

The product is classified: STOT RE 2 H373

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Adverse health effects

Ingestion can cause health problems, which include abdominal pain with burning, nausea and vomiting.

Acute effects:

Eye contact causes severe eye damage: it can cause severe conjunctivitis, corneal injury or eye injury. Symptoms may occur with delay.

In contact with skin, it may cause moderate irritation with erythema, edema, dryness and chapping.

Inhalation of vapors may cause moderate irritation of the upper respiratory tract.

Ingestion can cause disturbing health, which includes abdominal pain with burning, nausea and vomiting.

Toxicological information of the main substances found in the product:

tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 1 mg/l

Test: LC50 - Route: Inhalation - Species: Rat > 1-5 mg/l - Duration: 4h - Notes: OECD 412

Test: LD50 - Route: Oral - Species: Rat > 1780 mg/kg - Notes: OECD 401

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Negative - Notes: OECD 404

c) serious eye damage/irritation:

Test: Eye Irritant - Route: Eyes - Species: Rabbit Positive - Notes: OECD 405

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin - Species: Porcellino d'India Negative - Notes: OECD 406

e) germ cell mutagenicity:

Test: Mutagenesis - Route: In vitro - Species: Salmonella Typhimurium Negative

Test: Chromosomal aberration - Route: Oral - Species: Mouse Negative - Notes: OECD 471

f) carcinogenicity:

Test: Carcinogenicity - Route: Oral - Species: Rat Not Classificated - Based on available data, the classification criteria are not met

g) reproductive toxicity:

Test: NOAEL - Route: Oral - Species: Rat > 250 mg/kg - Notes: F1

i) STOT-repeated exposure:

Test: The substance may cause damage in the event of repeated inhalation the airway. - Route: Inhalation Positive

Sodium Hydroxide - CAS: 1310-73-2

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit = 1350 mg/kg

Test: LD50 - Route: Oral - Species: Rabbit 325 mg/kg

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive - Notes: OECD Guideline 404

c) serious eye damage/irritation:

Test: Eye Corrosive - Route: Eyes - Species: Rabbit Positive

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin Negative

e) germ cell mutagenicity:

Test: Ames test - Route: In vitro Negative

f) carcinogenicity:

Test: Carcinogenicity Not Classificated - No data available for the product

g) reproductive toxicity:

Test: Reproductive Toxicity Not Classificated - No data available for the product

trisodium nitrilotriacetate - CAS: 5064-31-3

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1.740 mg/kg

c) serious eye damage/irritation:

Test: Eye Irritant - Route: Eyes Positive

f) carcinogenicity:

Test: Carcinogenicity - Route: Oral - Species: Mouse - Duration: 3 months - Source: ECHA - Notes: Limitated evidence of Carcinogenic effect.

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.

KLEAN DET XP

Not classified for environmental hazards

Based on available data, the classification criteria are not met

tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Lepomis macrochirus > 100 mg/l - Duration h: 96

Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia Magna = 140 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72

b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Brachydanio rerio > 25.7 mg/l - Notes: 35 days - OECD TG 210
Endpoint: NOEC - Species: Daphnia Magna = 25 mg/l - Notes: 21 days - OECD TG 211
c) Bacteria toxicity:
Endpoint: 4 - Species: activated sludge > 500 mg/l - Duration h: 0.5
d) Terrestrial toxicity:
Endpoint: LC50 - Species: Eisenia Fetida = 156 mg/kg - Notes: 14 days - OECD 207

Sodium Hydroxide - CAS: 1310-73-2
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia = 76 mg/l - Duration h: 24
Endpoint: LC50 - Species: Fish = 35-189 mg/l - Duration h: 96
Endpoint: LC50 - Species: Oncorhynchus Mykiss = 45.4 mg/l - Duration h: 96
Endpoint: LC50 - Species: Gambusia affinis < 180 mg/l - Duration h: 96
Endpoint: LC50 - Species: Leuciscus idus = 189 mg/l - Duration h: 48
Endpoint: EC50 - Species: Ceriodaphnia dubia 40.4 mg/l - Duration h: 48

12.2. Persistence and degradability
None
KLEAN DET XP
Biodegradability: No data available. - Test: --- - Duration: ------%: - - Notes: -
tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8
Biodegradability: Non-readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.
Sodium Hydroxide - CAS: 1310-73-2
Biodegradability: The methods for the determination of biodegradability aren't applicable to inorganic substances. - Test: --- - Duration: --- - %: - - Notes: -

12.3. Bioaccumulative potential
KLEAN DET XP
Bioaccumulation: No data available - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.
tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8
Bioaccumulation: Bioaccumulative - Test: BCF - Bioconcentrantion factor 1.8 - Duration: 28 days - Notes: LEPOMIS MACROCHIIRUS
Sodium Hydroxide - CAS: 1310-73-2
Bioaccumulation: Not bioaccumulative - Test: BCF - Bioconcentrantion factor - - Duration: ----- Notes: -

12.4. Mobility in soil
KLEAN DET XP
Mobility in soil: No data available - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.
tetrasodium ethylene diamine tetraacetate - CAS: 64-02-8
Mobility in soil: 3 - Test: --- N.A. - Duration: ------Notes: -
Sodium Hydroxide - CAS: 1310-73-2
Mobility in soil: High solubility in water and mobility - Test: --- - - Duration: ----- Notes: -

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.

Do not reuse empty containers. Dispose of them in accordance with applicable regulations. Any product residues should be disposed of in accordance with applicable regulations by authorized companies. Retrieve if possible. Send to authorized disposal plants or incineration under controlled conditions. Work according to local and national regulations.

SECTION 14: Transport information

14.1. UN number

ADR-UN Number:	3267
IATA-UN Number:	3267
IMDG-UN Number:	3267

14.2. UN proper shipping name

ADR-Shipping Name:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(Sodium Hydroxide, tetrasodium ethylene diamine tetraacetate)
IATA-Shipping Name:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(Sodium Hydroxide, tetrasodium ethylene diamine tetraacetate)
IMDG-Shipping Name:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.(Sodium Hydroxide, tetrasodium ethylene diamine tetraacetate)

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: SG35

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)

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
Restriction 40

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

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:

H332 Harmful if inhaled.
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
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
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Carc. 2	3.6/2	Carcinogenicity, Category 2
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2

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
Skin Corr. 1A, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)
STOT RE 2, H373	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.
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.