SECTION1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product code : FORZA 100

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

Universal degreaser.
Sectors of use:
Private households (= general public = consumers)[SU21], Professional use[SU22]

Uses advised against
Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

BLUE MARINE SRLS
viale Jonio SN
74025 Marina di Ginosa (TA)
P.IVA e CF IT02927430732
TEL. 099/8271746 FAX 099/8272091
email: info@blue-marine.it
web. www.blue-marine.it

1.4. Emergency telephone number

Centro Antiveleni di Milano: +39 02 66101029 (CAV Ospedale Niguarda Cà Granda, Milano, Italy)

IPCS: http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/index.html

Tel. 099/8271746 (ore di ufficio)

SECTION2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:
GHS05

Hazard Class and Category Code(s):
Met. Corr. 1, Skin Corr. 1, Eye Dam. 1

Hazard statement Code(s):
H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.

The product can be corrosive to metals
Corrosive product: causes severe skin burns and eye damage.
If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to

iris.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):
GHS05 - Danger

Hazard statement Code(s):
H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.

Supplemental Hazard statement Code(s):
not applicable

Precautionary statements:
General
P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
Prevention
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Response
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.
Storage
P405 - Store locked up.
Disposal
P501 - Dispose of contents/container in accordance with local/regional/national/international regulation.

Contains:
POTASSIUM HYDROXYDE, 1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID, FATTY ALCOHOL, ETHOXYLATED, 2-AMINOETHANOL, (2-METHOXYMETHYLETHOXY)PROPANOL

Packaging to be fitted with child-resistant fastenings
Packaging to be fitted with a tactile warning
Content of VOC ready to use condition: 6,16 %

2.3. Other hazards

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

SECTION3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[w/w]	Classification	Identificativi
(2-METHOXYMETHYLETHOXY)PROPANOL	>= 3 < 5%		CE - CAS 34590-94-8 EINECS 252-104-2 REACH 01-2119450011-60
FATTY ALCOHOL, ETHOXYLATED	>= 3 < 5%	Acute Tox. 4, H302; Eye Dam. 1, H318	CE CAS EINECS REACH
POTASSIUM HYDROXYDE	>= 2 < 3%	Met. Corr. 1, H290; Acute Tox. 4, H302; Skin Corr. 1A, H314	CE 019-002-00-8 CAS 1310-58-3 EINECS 215-181-3 REACH 01-2119487136-33
3-BUTOXYPROPAN-2-OL	>= 1 < 3%	Skin Irrit. 2, H315; Eye Irrit. 2, H319	CE 603-052-00-8 CAS 5131-66-8 EINECS 225-878-4 REACH 01-2119475527-28
1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID	>= 1 < 3%	Met. Corr. 1, H290; Acute Tox. 4, H302; Eye Dam. 1, H318	CE CAS 2809-21-4 EINECS 220-552-8 REACH 01-2119510391-53
AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES	>= 0,1 < 1%	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 2, H411	CE CAS EINECS 931-292-6 REACH 01-2119490061-47
FATTY AMINE DERIVATE	>= 0,1 < 1%	Acute Tox. 4, H302; Skin Corr. 1A, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400	CE CAS EINECS REACH
2-AMINOETHANOL	>= 0,1 < 1%	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H332; STOT SE 3, H335; Aquatic Chronic 3, H412	CE 603-030-00-8 CAS 141-43-5 EINECS 205-483-3 REACH 01-2119486455-28

SECTION4. First aid measures

4.1. Description of first aid measures

Inhalation:
Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area.
If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:
Take contaminated clothing Immediately off.
In case of contact with skin, wash immediately with water.
Consult a physician immediately

Direct contact with eyes (of the pure product).:
Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately
Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:

Drink water with egg white; do not give bicarbonate.
Absolutely do not induce vomiting or emesis. Seek medical advice immediately.

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

No data available.

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

If medical advice is needed, have product container or label at hand.
Immediately call a POISON CENTER/doctor.

SECTION5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:
Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:
Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus
Safety helmet and full protective suit.
The spray water can be used to protect the people involved in the extinction
You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)
Keep containers cool with water spray

SECTION6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:
Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:
Wear mask, gloves and protective clothing.
Eliminate all unguarded flames and possible sources of ignition. No smoking.
Provision of sufficient ventilation.
Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill with earth or sand.
If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the the

authorities.
Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:
Rapidly recover the product, wear a mask and protective clothing
Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.
Prevent it from entering the sewer system.

6.3.2 For cleaning up:
After wiping up, wash the area and materials involved

6.3.3 Other information:
None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors
Wear protective gloves/protective clothing/eye protection/face protection.
At work do not eat or drink.
See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store in a cool place, away from sources of heat and `direct exposure of sunlight.

7.3. Specific end use(s)

Private households (= general public = consumers):
Handle in a well ventilated area.

Public domain (administration, education, entertainment, services, craftsmen):
Follow the rules of good hygiene in the workplace.

SECTION8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:
(2-METHOXYMETHYLETHOXY)PROPANOL:
TLV-TWA: 100 ppm, 600mg/m3 (ACGIH 1999).
TLV-STEL: 150 ppm, 900mg/m3 (ACGIH 1999).
TLV-TWA: 50ppm, 308mg/m3 (EU-IOELV)
TLV-TWA: 50ppm, 308mg/m3 (Italia)

POTASSIUM HYDROXYDE:

TLV-STEL:2 mg/m3, 0,87ppm (EC).
TLV-TWA:2 mg/m3 (EC).

3-BUTOXYPROPAN-2-OL:
TLV-TWA= 50 ppm (DOW IHG)

2-AMINOETHANOL:
TLV-TWA: 1 ppm, 2.5 mg/m3 (CE), 3ppm (ACGIH2002)
TLV-STEL: 3 ppm, 7.6 mg/me (CE), 6 ppm (ACGIH 2002).
MAK: 2 ppm, 5,1 mg/m ³ sensitization of cute (the Sh); Category peak limitation: (2); class Group of pregnancy risk: C (2002)

- Substance: (2-METHOXYMETHYLETHOXY)PROPANOL
DNEL
Systemic effects Long term Workers inhalation = 308 (mg/m3)
Systemic effects Long term Workers dermal = 283 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 37,2 (mg/m3)
Systemic effects Long term Consumers dermal = 121 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 36 (mg/kg bw/day)
PNEC
Sweet water = 19 (mg/l)
sediment Sweet water = 70,2 (mg/kg/sediment)
Sea water = 1,9 (mg/l)
sediment Sea water = 7,02 (mg/kg/sediment)
intermittent emissions = 190 (mg/l)
STP = 4168 (mg/l)
ground = 4,59 (mg/kg ground)

- Substance: POTASSIUM HYDROXYDE
DNEL
Systemic effects Long term Workers inhalation = 1 (mg/m3)
Systemic effects Long term Consumers inhalation = 1 (mg/m3)

- Substance: 3-BUTOXYPROPAN-2-OL
DNEL
Systemic effects Long term Workers inhalation = 270,5 (mg/m3)
Systemic effects Long term Workers dermal = 44 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 33,8 (mg/m3)
Systemic effects Long term Consumers dermal = 16 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 8,75 (mg/kg bw/day)
PNEC
Sweet water = 0,525 (mg/l)
sediment Sweet water = 2,36 (mg/kg/sediment)
Sea water = 0,0525 (mg/l)
sediment Sea water = 0,236 (mg/kg/sediment)
STP = 10 (mg/l)
ground = 0,16 (mg/kg ground)

- Substance: 1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID
DNEL
Systemic effects Long term Consumers oral = 6,5 (mg/kg bw/day)
Systemic effects Short term Consumers oral = 6,5 (mg/kg bw/day)

- Substance: AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES
DNEL
Systemic effects Long term Workers inhalation = 6,2 (mg/m3)
Systemic effects Long term Workers dermal = 11 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 1,53 (mg/m3)
Systemic effects Long term Consumers dermal = 5,5 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,44 (mg/kg bw/day)
PNEC
Sweet water = 0,0335 (mg/l)
sediment Sweet water = 5,24 (mg/kg/sediment)
Sea water = 0,00335 (mg/l)
sediment Sea water = 0,524 (mg/kg/sediment)
intermittent emissions = 0,0335 (mg/l)
STP = 24 (mg/l)
ground = 1,02 (mg/kg ground)

8.2. Exposure controls

Appropriate engineering controls:
Private households (= general public = consumers):
Observe usual safety precautions in the handling of chemicals.

Public domain (administration, education, entertainment, services, craftsmen):
Well ventilated environment. Observe the safety measures used in handling chemicals.

Individual protection measures:

a) Eye / face protection
When handling the pure product use safety glasses (spectacles cage) (EN 166).

b) Skin protection

i) Hand protection
When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3)

ii) Other
When handling the pure product wear full protective skin clothing.

c) Respiratory protection
Not needed for normal use.

d) Thermal hazards
No hazard to report

Environmental exposure controls:
Use according to good working practices to avoid pollution into the environment.

SECTION9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value
Appearance	Green liquid

Physical and chemical properties	Value
Odour	Mentholated
Odour threshold	Undefined
pH	14
Melting point/freezing point	Undefined
Initial boiling point and boiling range	Undefined
Flash point	Undefined
Evaporation rate	Undefined
Flammability (solid, gas)	Undefined
Upper/lower flammability or explosive limits	Undefined
Vapour pressure	Undefined
Vapour density	Undefined
Relative density	1g/mL
Solubility	Undefined
Water solubility	Miscible in any relationship
Partition coefficient: n-octanol/water	Undefined
Auto-ignition temperature	Undefined
Decomposition temperature	Undefined
Viscosity	Undefined
Explosive properties	Undefined
Oxidising properties	Undefined

9.2. Other information

Content of VOC ready to use condition: 6,16 %

SECTION10. Stability and reactivity

10.1. Reactivity

Related to contained substances:
1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID:
Decomposes violently if heated at T> 200°C

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Related to contained substances:
2-AMINOETHANOL:
Air and heat.

10.5. Incompatible materials

It can generate inflammable gases to contact with halogenated organic substances, elementary metals.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = 6.065,6 mg/kg
ATE(mix) dermal = 1.000.000,0 mg/kg
ATE(mix) inhal = 11.000,0 mg/l/4 h

(a) acute toxicity: (2-METHOXYMETHYLETHOXY)PROPANOL: The vapor is irritating to the eyes and respiratory tract. The substance may cause effects on the central nervous system, causing narcosis.
The toxic to a single oral dose should be considered extremely low.
POTASSIUM HYDROXYDE: ACUTE HAZARDS/SYMPTOMS:
Inhalation: Corrosive. Burning sensation. Sore throat. Cough. Difficulty in breathing. Shortness of breath. Symptoms may be delayed (see notes).
SKIN: Irritant. Redness. Pain. Blisters. Severe skin burns.
EYES: Corrosive. Redness. Pain. Blurred vision. Severe deep burns.
Ingestion: Corrosive. Abdominal pain. Burning sensation. Shock or collapse.
3-BUTOXYPROPAN-2-OL: ACUTE HAZARDS/Symptoms:
SKIN: Redness. Pain.
EYE: Redness. Pain.
1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID: The product is harmful if swallowed and even small quantity ingested can cause significant health problems (abdominal pain, nausea, vomiting, diarrhea).
Any vapours are caustic to the respiratory system and can cause pulmonary edema, whose symptoms become posters, sometimes, only after a few hours.
2-AMINOETHANOL: Exposure may cause attenuation of vigilance.
ACUTE HAZARDS/SYMPTOMS;
Inhalation: Cough. Headaches. Shortness of breath. Sore throat.
SKIN: Redness. Pain. Skin burns.
EYE: Redness. Pain. Severe deep burns.
INGESTION: Abdominal pain. Burning sensation. Shock or collapse.
NOTE: depending on the degree of exposure, periodic medical examinations are indicated. The smell a warning too little exposure limit is exceeded. DO NOT take home work clothes.
(b) skin corrosion/irritationCorrosive product: causes severe skin burns and eye damage.
POTASSIUM HYDROXYDE: The substance is highly corrosive to the respiratory tract. Corrosive if swallowed. Inhaling an aerosol of this substance can cause pulmonary edema (see notes).
1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID: The product is corrosive and causes severe burns and blistering on the skin that can appear even after the exposure.
2-AMINOETHANOL: Corrosive if swallowed
3-BUTOXYPROPAN-2-OL: Irritating
1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID: Irritating
2-AMINOETHANOL: The vapors are irritating to the skin and respiratory tract.

(c) serious eye damage/irritation: Corrosive product: causes severe skin burns and eye damage. - If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.
POTASSIUM HYDROXYDE: Very corrosive.
1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID: In contact with the eyes causes serious injury and can cause corneal opacity, Iris lesion, irreversible staining of the eye.
2-AMINOETHANOL: Corrosive
(2-METHOXYMETHYLETHOXY)PROPANOL: Irritating
3-BUTOXYPROPAN-2-OL: Irritating
1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID: Irritating
2-AMINOETHANOL: The vapors are irritating.
(d) respiratory or skin sensitization: 2-AMINOETHANOL: Repeated or prolonged contact may cause skin sensitization.
(e) germ cell mutagenicity: based on available data, the classification criteria are not met.
(f) carcinogenicity: based on available data, the classification criteria are not met.
(g) reproductive toxicity: based on available data, the classification criteria are not met.
(h) specific target organ toxicity (STOT) single exposure: (2-METHOXYMETHYLETHOXY)PROPANOL: The toxic to a single oral dose should be considered extremely low.
1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID: The product may cause mild irritation of the mucous membranes and upper respiratory tract and eyes and skin.
Any vapours are caustic to the respiratory system and can cause pulmonary edema, whose symptoms become posters, sometimes, only after a few hours.
Ingestion may cause burns to the mouth, throat and esophagus; vomiting, diarrhea, edema, swelling of the larynx and causing suffocation.
Can also be perforation of the gastrointestinal tract.
2-AMINOETHANOL: The substance may cause effects on the central nervous system.
(i) specific target organ toxicity (STOT) repeated exposure: (2-METHOXYMETHYLETHOXY)PROPANOL: The liquid degreasing the skin features.
POTASSIUM HYDROXYDE: Repeated or prolonged contact with skin may cause dermatitis.
2-AMINOETHANOL: Repeated or prolonged contact may cause skin sensitization.
(j) aspiration hazard: POTASSIUM HYDROXYDE: The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.
Evaporation at 20°C negligible; a harmful concentration of aereodisperse particles can, however, be reached quickly.

Related to contained substances:
(2-METHOXYMETHYLETHOXY)PROPANOL:
Routes of exposure: the substance can be absorbed into the body by inhalation of vapours, through the skin and if swallowed.
Inhalation risk: A harmful contamination of air will be reached quite slowly through evaporation of the substance at 20°C.

LD50 (rat) Oral (mg/kg body weight) = 5130
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 9510

POTASSIUM HYDROXYDE:
NOTE. The exposure limit value must not be exceeded in any moment of exposure. Symptoms of lung oedema often do not occur before a few hours and are aggravated by physical effort. Are therefore essential rest and medical observation.
LD50 (rat) Oral (mg/kg body weight) = 270

3-BUTOXYPROPAN-2-OL:
ROUTES of EXPOSURE: the substance can be absorbed into the body through the skin and by ingestion.
INHALATION RISK: cannot be given any indication about the speed with which it reaches a harmful contamination in the air due to evaporation of the substance at 20°C.
LD50 (rat) Oral (mg/kg body weight) = 3300

1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID:
Symptoms of exposure may include: burning sensation, cough, asthmatic breathing, laryngitis, short breath, headache, nausea and vomiting.
Burns cause severe burning sensation and pain.

LD50 (rat) Oral (mg/kg body weight) = 2800
LD50 Dermal (rat or rabbit) (mg/kg body weight) > 6000

AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES:
LD50 (rat) Oral (mg/kg body weight) = 1064
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 1064

2-AMINOETHANOL:
ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation and ingestion through the skin.
INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20°C; However, for spraying or scattering, much more quickly.
LD50 (rat) Oral (mg/kg body weight) = 2100
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 1000

SECTION12. Ecological information

12.1. Toxicity

Related to contained substances:
(2-METHOXYMETHYLETHOXY)PROPANOL:
LC50 > 1,000 mg/L (fish, Poecilia reticulata, 96h)
LC50 = 1,919 mg/L (invertebrates, Daphnia magna, 48 h)
LC50 > 1,000 mg/L (imvertebrati, Crangon crangon (shrimps), 96h)
E50 > 969 mg/L (algae Pseudokirchneriella subcapitata (algae cloroficee), 96h)
C(E)L50 (mg/l) = 1000

POTASSIUM HYDROXYDE:
This substance can be dangerous for the environment; Special attention must be paid to aquatic organisms.

1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID:
LC50=195mg/L (fish, rainbow trout, 96h)
LC50=180mg/L (fish, sheepshead minnow, 96h)
LC50=868mg/L (fish, bluegill, 96h)
EC50= 527mg/L (daphnia, daphnia magna, 48h)

AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES:
CL50 >1mg/L (fish, 96h)
EC50 = 0,266mg/L (algae, 72h)
EC50 = 3,1mG/L (invertebrates, Daphnia Magna, 48h)
NOEC (mg/l) = 0,067

2-AMINOETHANOL:
With proper placing of small concentrations in biological purification plants should not compromise the degradation activity of activated sludge.
C(E)L50 (mg/l) = 150

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

Related to contained substances:
(2-METHOXYMETHYLETHOXY)PROPANOL:

Readily degradable in the environment.

1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID:
22,88% (120mg/L - 5d - OECD 301D)

AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES:
>80%

2-AMINOETHANOL:
Degree of elimination: 70 - 80% (8 d)
Appraisal: Easy biodegradable
Chemical oxygen question (BOD) Duration of incubation 5d : 800mg/g

12.3. Bioaccumulative potential

Related to contained substances:
(2-METHOXYMETHYLETHOXY)PROPANOL:
Low potential for bioconcentration (FBC < 100, Log Pow <3).

1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID:
Log Pow=-3,5

AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES:
Log Pow=2.7

2-AMINOETHANOL:
Not persistent and not bioaccumulabile (log Pow <1)

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

12.6. Other adverse effects

No adverse effects

SECTION13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.
Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

SECTION14. Transport information

14.1. UN number

ADR/RID/IMDG/ICAO-IATA: 1760

If subject to the following characteristics is ADR exempt:
Combination packagings: per inner packaging 1 L per package 30 Kg
Inner packagings placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 1 L per package 20 Kg

14.2. UN proper shipping name

ADR/RID/IMDG: LIQUIDO CORROSIVO, N.A.S. (IDROSSIDO DI POTASSIO, 1-IDROSSIETANO-1,1-ACIDO DIFOSFONICO, AMMINE, C12-14 (NUMERO PARI) -ALCHILDIMETIL, N-OSSIDO, 2-AMMINOETANOLO, Limonene)
ADR/RID/IMDG: CORROSIVE LIQUID, N.O.S. (POTASSIUM HYDROXYDE, 1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID, AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES, 2-AMINOETHANOL, Limonene)
ICAO-IATA: CORROSIVE LIQUID, N.O.S. (POTASSIUM HYDROXYDE, 1-HYDROXYETHYLIDENEDIPHOSPHONIC ACID, AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES, 2-AMINOETHANOL, Limonene)

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 8
ADR/RID/IMDG/ICAO-IATA: Label : 8
ADR: Tunnel restriction code : E
ADR/RID/IMDG/ICAO-IATA: Limited quantities : 1 L
IMDG - EmS : F-A, S-B

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: II

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is not environmentally hazardous
IMDG: Marine polluting agent : Not

14.6. Special precautions for user

The goods must be transported by vehicles authorized to transport of dangerous goods according to the current edition of ADR requirements and applicable national regulations.
The goods must be in original packing, however, in packaging made of materials resistant to their content and not likely to generate with this dangerous reactions. People loading and unloading dangerous goods must be trained on the risks from these substances and that must be taken in case of emergency situations.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

It is not intended to carry bulk

SECTION15. Regulatory information

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

Reg (EC) n. 1907/2006 (REACH), Reg (EC) n. 1272/2008 (CLP), Reg (EC) n. 830/2015 (Requirements for the

compilation of safety data sheets), Reg (E) n.790/2009, Dir 96/82/EC as amended.
REGULATION (EU) No 1357/2014 - waste:
HP8 - Corrosive

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION16. Other information

16.1. Other information

Points modified compared to previous release: 1.1. Product identifier, 1.2. Relevant identified uses of the substance or mixture and uses advised against, 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3. Other hazards, 4.3. Indication of any immediate medical attention and special treatment needed, 8.1. Control parameters, 8.2. Exposure controls, 9.2. Other information, 10.4. Conditions to avoid, 11.1. Information on toxicological effects, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.5. Results of PBT and vPvB assessment, 14.2. UN proper shipping name, 14.6. Special precautions for user

Description of the hazard statements exposed to point 3
H302 = Harmful if swallowed.
H318 = Causes serious eye damage.
H290 = May be corrosive to metals.
H314 = Causes severe skin burns and eye damage.
H315 = Causes skin irritation.
H319 = Causes serious eye irritation.
H400 = Very toxic to aquatic life.
H411 = Toxic to aquatic life with long lasting effects.
H312 = Harmful in contact with skin.
H332 = Harmful if inhaled.
H335 = May cause respiratory irritation.
H412 = Harmful to aquatic life with long lasting effects.

Classification based on data of all mixture components

Regulatory information:
Reg 1907/2006 EC
Reg 1272/2008 EC
Reg 830/2015 EC

Bibliographic data :
SAX 12 Ed Van Nostrand Reinhold
MERCK INDEX 15 Ed
ECHA: European Chemicals Agency
OSHA: European Agency for Safety and Health at Work
IARC: International Agency for Research on Cancer
IPCS: International Programme on Chemical Safety (Cards)
NIOSH: Registry of toxic effects of chemical substances (1983)
ACGIH: American Conference of Governmental Industrial Hygienists
TOXNET: Toxicology Data Network
WHO: World Health Organization
CheLIST: Chemical Lists Information System

Acronyms:
- ACGIH American Conference of Governmental Industrial Hygienists
- ADR Accord 5Européen Relatif au Transport International des Marchandises Dangereuses par Route (European

accord regarding international transport of dangerous goods by land)
- bw body weight
- CLP Classification, Labelling and Packaging
- CSR Chemical Safety Report
- DMEL Derived Minimal Effect Level
- DNEL Derived No Effect Level
- dw dry weight
- EC Effective Concentration
- IATA International Air Transport Association
- IMDG International Maritime Dangerous Goods
- LC Lethal Concentration
- LD Lethal Dose
- m.w. molecular weight
- PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted No Effect Concentration
- OECD Organisation / Office for Economic Co-operation and Development
- STEL Short Term Exposure Limit
- SVHC Substance of Very High Concern
- TLV Threshold Limit Value
- TWA Time Weighted Average
- vPvB very Persistent, very Bioaccumulative and toxic
- WGK Wassergefährdungsklasse (Water hazard class)

NOTICE TO USERS
The information contained in this sheet are based on the knowledge available at the date of the preparation of this sheet.
The user must be aware of the possible risks associated with the use of the product, other than that for which the product is supplied. The sheet does not exonerate the user from knowing and applying all the regulations governing its activities. The set of regulations mentioned is simply to help the user to fulfill its obligations regarding the use of hazardous products.
This sheet does not exonerate the user from other legal obligations than those mentioned and from rules regulating possession and use of the product, since the user is the only responsible.

*** This sheet supersedes all previous editions.