

Safety Data Sheet dated 4/12/2014, version 1 In compliance with Regulation (EC) 453/2010

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Mixture identification:

Trade name: SHINEX

Product type: Water based cleaner

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

Recommended use:

Washing and cleaning products (including solvent based products)

Uses advised against:

Not available

1.3. Details of the supplier of the safety data sheet

Supplier:

AirChem Consumables. Sharjah Airport International Zone (SAIF Zone, A2-099), Sharjah, UAE. P.O. BOX 8994

TEL: +971 6 552 8946 FAX: +971 6 552 8947, Email: airacc@acc.ae

Competent person responsible for the safety data sheet:

airacc@acc.ae

1.4. Emergency telephone number

AirChem Consumables, TEL: +971 6 552 8946 FAX: +971 6 552 8947, Email: airacc@acc.ae

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

Xi Irritant

R Phrases:

R36 Irritating to eyes.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:



Symbols:

Xi Irritant

R Phrases:

R36 Irritating to eyes.

S Phrases

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

1 - 5% Alcohol (C11-13) polyethoxylated

REACH N°: Polymer, CAS: 68439-54-3, EC: 931-985-3

Xn,Xi; R22-41

3.1/4/Oral Acute Tox. 4 H302

3.3/1 Eye Dam. 1 H318

1 - 5% Alkyl betaine

REACH N°: 01-2119529251-48, CAS: 66455-29-6, EC: 211-669-5

C: R34

3.2/1B Skin Corr. 1B H314

3.3/1 Eye Dam. 1 H318

4.1/C3 Aquatic Chronic 3 H412

1 - 5% Dipropylen glycol ether

REACH N°: 01-2119450011-60-XXXX, CAS: 34590-94-8, EC: 252-104-2

substance with a Community workplace exposure limit

1 - 5% Sodium metasilicate

REACH N°: 01-2119449811-37-XXXX, Index number: 014-010-00-8, CAS: 10213-79-3, EC:

229-912-9 Xi,C; R34-37

3.2/1B Skin Corr. 1B H314

3.8/3 STOT SE 3 H335

2.16/1 Met. Corr. 1 H290

1 - 5% Glycerol

CAS: 56-81-5, EC: 200-289-5

0.1-0.5% Quaternary ammonium compounds, benzyl-alkyldimethyl, chlorides

CAS: 68424-85-1, EC: 270-325-2

Xn,C,N; R50-21/22-34

3.1/4/Dermal Acute Tox. 4 H312

3.1/4/Oral Acute Tox. 4 H302

3.2/1B Skin Corr. 1B H314

4.1/A1 Aquatic Acute 1 H400

0.1-0.5% 2,2'-iminodiethanol

REACH N°: 01-2119488930-28-XXX, Index number: 603-071-00-1, CAS: 111-42-2, EC: 203-868-0

Xn,Xi; R22-38-41-48/22

3.9/2 STOT RE 2 H373

3.2/2 Skin Irrit. 2 H315

3.3/1 Eye Dam. 1 H318

3.1/4/Oral Acute Tox. 4 H302

0.1-0.5% 1,1'-oxybis(benzene)

REACH N°: 05-2114478530-48-0000, CAS: 101-84-8, EC: 202-981-2

Xi,N; R36/37/38-50/53

3.3/2 Eye Irrit. 2 H319

3.8/3 STOT SE 3 H335

3.2/2 Skin Irrit. 2 H315

4.1/A1 Aquatic Acute 1 H400

4.1/C1 Aquatic Chronic 1 H410

Declaration of ingredients according to Detergent Regulation 648/2004:

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

surfactants

The product also contains: Perfumes

For the complete text of the hazard and risk phrases refer to paragraph 16

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

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:

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

If breathing is irregular or stopped, administer artificial respiration.

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

None

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:

None

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 food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

For more information see Technical date bulletin

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Contained substances

Dipropylen glycol ether - CAS: 34590-94-8

ACGIH - LTE mg/m3(8h): 606 - LTE ppm: 100 - STE mg/m3(15min): 909 - STE ppm: 150 - Behaviour: Binding - Notes: Skin - Critical effects: Eye and respiratory irritation , central nervous system .

OEL - LTE mg/m3: 308 - LTE ppm: 50 - Behaviour: Binding - Notes: Skin

OSHA - LTE ppm: 150 - Behaviour: Binding

Sodium metasilicate - CAS: 10213-79-3

OEL - LTE mg/m3: 10 - Behaviour: Binding - Notes: Respirable fraction

OEL - LTE mg/m3: 3 - Behaviour: Binding - Notes: Inhalable fraction

OEL - STE mg/m3: 2 - Behaviour: Indicative - Notes: analogy with NaOH

Glycerol - CAS: 56-81-5

ACGIH - LTE mg/m3: 10 - Behaviour: Binding - Critical effects: mists , respiratory irritation

2,2'-iminodiethanol - CAS: 111-42-2

ACGIH - LTE mg/m3(8h): 1 - Behaviour: Binding - Notes: Cute, A3 - Critical effects: inhalable particles , vapors and aerosols . Liver , kidneys .

OEL - LTE mg/m3(8h): 2 - LTE ppm: 0.46 - Behaviour: Binding

1,1'-oxybis(benzene) - CAS: 101-84-8

ACGIH - LTE mg/m3(8h): 7 - LTE ppm: 1 - STE mg/m3(15min): 14 - STE ppm: 2 - Behaviour: Binding - Critical effects: eye and respiratory irritation, nausea

DNEL Exposure Limit Values

Alkyl betaine - CAS: 66455-29-6

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Worker Professional: 60.42 mg/kg - Consumer: 36.25 - U.M.: mg/kg - Exposure: Human Dermal -
            Frequency: Long Term, systemic effects
            Worker Professional: 63.6 mg/kg - Exposure: Human Inhalation - Frequency: Long Term, systemic
            effects
            Consumer: 3.63 - U.M.: mg/m3 - Exposure: Human Oral - Frequency: Long Term, systemic effects
      Sodium metasilicate - CAS: 10213-79-3
            Worker Professional: 6.22 mg/m3 - Consumer: 1.55 - U.M.: mg/m3 - Exposure: Human Inhalation -
            Frequency: Long Term, systemic effects
            Worker Professional: 1.49 mg/kg - Consumer: 0.74 - U.M.: mg/kg - Exposure: Human Dermal -
            Frequency: Long Term, systemic effects
            Consumer: 0.74 - U.M.: mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
      Quaternary ammonium compounds, benzyl-alkyldimethyl, chlorides - CAS: 68424-85-1
            Consumer: 3.4 - U.M.: mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
            Worker Professional: 3.96 mg/m3 - Consumer: 1.64 - U.M.: mg/m3 - Exposure: Human Inhalation -
            Frequency: Long Term, systemic effects
            Worker Professional: 5.7 mg/kg - Consumer: 3.4 - U.M.: mg/kg - Exposure: Human Dermal -
            Frequency: Long Term, systemic effects
      2,2'-iminodiethanol - CAS: 111-42-2
            Worker Professional: 0.13 mg/kg - Consumer: 0.07 - U.M.: mg/kg - Exposure: Human Dermal -
            Frequency: Long Term, systemic effects
            Worker Professional: 1 mg/m3 - Consumer: 0.25 - U.M.: mg/m3 - Exposure: Human Inhalation -
            Frequency: Long Term, local effects
            Consumer: 0.06 - U.M.: mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
      1,1'-oxybis(benzene) - CAS: 101-84-8
            Worker Professional: 58.3 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic
            effects
            Worker Professional: 245.8 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic
            effects
            Worker Professional: 0.15 mg/cm2 - Exposure: Human Dermal - Frequency: Long Term, local
            Worker Professional: 9.68 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local
            effects
PNEC Exposure Limit Values
      Alkyl betaine - CAS: 66455-29-6
            Target: Fresh Water - Value: 0.0135 mg/l
            Target: Marine water - Value: 0.00135 mg/l
            Target: Sewerage treatment plants - Value: 2.7 mg/l
            Target: Freshwater sediments - Value: 0.028 mg/kg
            Target: Marine water sediments - Value: 0.0028 mg/kg
            Target: Soil - Value: 0.002 mg/kg
      Sodium metasilicate - CAS: 10213-79-3
            Target: Fresh Water - Value: 7.5 mg/l
            Target: Marine water - Value: 1 mg/l
            Target: Occasional issue - Value: 7.5 mg/l
            Target: Sewerage treatment plants - Value: 1000 mg/l
      Quaternary ammonium compounds, benzyl-alkyldimethyl, chlorides - CAS: 68424-85-1
            Target: Marine water - Value: 0.00096 mg/l
            Target: Fresh Water - Value: 0.0009 mg/l
            Target: Occasional issue - Value: 0.00016 mg/l
            Target: Marine water sediments - Value: 13.09 mg/kg
            Target: Freshwater sediments - Value: 12.27 mg/kg
            Target: Soil - Value: 7 mg/kg
            Target: Sewerage treatment plants - Value: 0.4 mg/l
      2,2'-iminodiethanol - CAS: 111-42-2
            Target: Fresh Water - Value: 0.0022 mg/l
            Target: Marine water - Value: 0.00022 mg/l
            Target: Freshwater sediments - Value: 0.019 mg/kg
            Target: Marine water sediments - Value: 0.0019 mg/kg
            Target: Soil - Value: 0.00108 mg/kg
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Target: Sewerage treatment plants - Value: 100 mg/l

Target: Occasional issue - Value: 0.022 mg/l

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour: Clear green liquid

Odour: Marsiglia
Odour threshold: n.av. mg/m3
pH: < 12.5
Melting point / freezing point: initial 0 °C

Initial boiling point and boiling range: initial 100 °C Solid/gas flammability: na Upper/lower flammability or explosive limits: na % v/v Vapour density (air=1): > 1 Flash point: none °C Evaporation rate:

Evaporation rate:

Vapour pressure:

Relative density:

Solubility in water:

Solubility in oil:

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

na

3.2 kPa
1.07 g/ml
complete
na
n.av.
complete
na
n.av.
na°C
n.av. °C

Viscosity: n.av. mPa.s Explosive properties: none Oxidizing properties: not Oxidant

9.2. Other information

Miscibility: complete in water

Fat Solubility: na
Conductivity: n.av.
Substance Groups relevant properties: na

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

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 main substances found in the mixture:

Alcohol (C11-13) polyethoxylated - CAS: 68439-54-3

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a) acute toxicity:
               LD50 Oral Rat > 300-2000 mg/kg
               LD50 Skin Rat > 2000 mg/kg
         c) serious eye damage/irritation:
               Eye Irritant Rabbit Positive serious injury
         Alkyl betaine - CAS: 66455-29-6
         a) acute toxicity:
               LD50 Oral Rat = 3202 mg/kg
               LD50 Skin Rat > 2000 mg/kg
         b) skin corrosion/irritation:
               Eye Corrosive EYES Rabbit Positive
               Skin Corrosive Skin Rabbit Positive
         Dipropylen glycol ether - CAS: 34590-94-8
         a) acute toxicity:
               LD50 Oral Rat = 5135 mg/kg
               LD50 Skin Rabbit = 9500 mg/kg
               LC50 Inhalation Rat = 55 mg/l 4 hours
               LC50 Inhalation Rat > 275 Ppm 7 hours
         Sodium metasilicate - CAS: 10213-79-3
         a) acute toxicity:
               LD50 Oral Rat > 1152 mg/kg
               LD50 Oral Rat -1 1349 mg/kg
               LC50 Inhalation Rat > 2.06 g/m3 4 hours
               LD50 Skin Rat > 5000 mg/kg bw
         b) skin corrosion/irritation:
               Skin Corrosive Skin Rat Positive OECD 404
         c) serious eye damage/irritation:
               Eye Irritant EYES Rabbit Positive OECD 405
         Glycerol - CAS: 56-81-5
         a) acute toxicity:
               LD50 Oral Rat = 12.6 g/kg
               LD50 Oral Mouse = 26.0 g/kg
         Quaternary ammonium compounds, benzyl-alkyldimethyl, chlorides - CAS: 68424-85-1
         a) acute toxicity:
               LD50 Oral Rat = 397.5 mg/kg
               LD50 Oral Mouse = 919 mg/kg
               LD50 Skin Rat > 800 mg/kg
               LD50 Skin Rabbit = 3412 mg/kg
         b) skin corrosion/irritation:
               Eye Irritant EYES Rabbit Positive
               Skin Corrosive Skin Rat Positive
         2,2'-iminodiethanol - CAS: 111-42-2
         a) acute toxicity:
               LD50 Oral Rat > 680 mg/kg
               LD50 Oral Rat -1 1100 mg/kg
               LD50 Oral Rat = 1600 mg/kg
               LD50 Skin Rabbit = 13 g/kg Portale Reach
               LCLo Inhalation Rat = 0.2 mg/l 8 hours
         1,1'-oxybis(benzene) - CAS: 101-84-8
         a) acute toxicity:
               LD50 Oral Rat > 5000 mg/kg
               LD50 Oral Mouse = 2830 mg/kg
               LD50 Skin Rabbit > 7940 mg/kg
If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered
as N.AV.:
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- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;

- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Based on the information available it is not expected that this product may cause any adverse environmental effect when use instructions and disposal recommendations are followed.

Adopt good working practices, so that the product is not released into the environment.

List of substances hazardous to the environment and eco-toxicological information available:

Alkyl betaine - CAS: 66455-29-6

a) Aquatic acute toxicity:

LC50 Fish = 4.44 mg/l 96

Dipropylen glycol ether - CAS: 34590-94-8

a) Aquatic acute toxicity:

LC50 Fish > 10000 mg/l 96

LC50 Fish > 1000 mg/l 96 Poecilia reticulata

EC50 Daphnia = 1919 mg/l 48 Daphnia magna

EC50 Algae > 969 mg/l 72 Selenastrum capricornutum

Sodium metasilicate - CAS: 10213-79-3

a) Aquatic acute toxicity:

LC50 Fish = 210 mg/l 96 Brachydanio rerio

LC50 Fish = 2320 mg/l 96 Gambusia affinis

EC50 Daphnia = 1700 mg/l 48 Daphnia magna

EC50 Algae = 207 mg/l 72 Scenedesmus subspicatus

Glycerol - CAS: 56-81-5

a) Aquatic acute toxicity:

LC50 Fish > 5.000 mg/l 96

EC50 Daphnia > 10.000 mg/l 24

EC50 Bacteria > 10.000 mg/l 16

Quaternary ammonium compounds, benzyl-alkyldimethyl, chlorides - CAS: 68424-85-1

a) Aquatic acute toxicity:

LC50 Fish = 0.515 mg/l 96

EC50 Daphnia = 0.016 mg/l 48 Daphnia magna

EC50 Algae = 0.06 mg/l 96 Selenastrum capricornum

b) Aquatic chronic toxicity:

NOEC Algae = 0.009 mg/l

2,2'-iminodiethanol - CAS: 111-42-2

a) Aquatic acute toxicity:

EC50 Daphnia = 55 mg/l 48 Daphnia magna

LC50 Fish = 1460 mg/l 96 Pimephales promelas

EC50 Algae = 2.2 mg/l 96 Pseudokirchneriella subcapitata

b) Aquatic chronic toxicity:

NOEC Daphnia = 0.78 mg/l 504 Daphnia magna

1,1'-oxybis(benzene) - CAS: 101-84-8

a) Aquatic acute toxicity:

LC50 Fish = 36 mg/l 96

EC50 Daphnia = 1.7 mg/l 48

EC50 Algae = 2.5 mg/l 96

12.2. Persistence and degradability

Alkyl betaine - CAS: 66455-29-6

Biodegradability: Readily biodegradable - Test: CO2 production - Duration: 28 days - %: 63 - Notes:

Not applicable

Dipropylen glycol ether - CAS: 34590-94-8

Biodegradability: Readily biodegradable - Test: Not applicable - Duration: Not applicable - %: Not

applicable - Notes: Not applicable

Quaternary ammonium compounds, benzyl-alkyldimethyl, chlorides - CAS: 68424-85-1

Biodegradability: Readily biodegradable - Test: Not applicable - Duration: Not applicable - %: Not applicable - Notes: Not applicable

2,2'-iminodiethanol - CAS: 111-42-2

Biodegradability: Readily biodegradable - Test: Not applicable - Duration: Not applicable - %: Not applicable - Notes: Not applicable

1,1'-oxybis(benzene) - CAS: 101-84-8

Biodegradability: Readily biodegradable - Test: Not applicable - Duration: Not applicable - %: Not applicable - Notes: Not applicable

Regulation (EC) No. 648/2004 on Detergents and amendments:

Surfactant(s) contained in this preparation comply with biodegradability criteria as defined in (EC) regulations on detergents.

12.3. Bioaccumulative potential

Alkyl betaine - CAS: 66455-29-6

Bioaccumulation: Not bioaccumulative - Test: Not applicable Not applicable - Duration: Not applicable - Notes: Not applicable

Sodium metasilicate - CAS: 10213-79-3

Bioaccumulation: Not bioaccumulative - Test: Not applicable Not applicable - Duration: Not applicable - Notes: Not applicable

Quaternary ammonium compounds, benzyl-alkyldimethyl, chlorides - CAS: 68424-85-1

Bioaccumulation: Not applicableTest: BCF - Bioconcentrantion factor 0.5 - Duration: Not applicable - Notes: Not applicable

Bioaccumulation: Not applicable Test: Kow - Partition coefficient 0.5 - Duration: Not applicable - Notes: Not applicable

2,2'-iminodiethanol - CAS: 111-42-2

Bioaccumulation: Not bioaccumulative - Test: Not applicable Not applicable - Duration: Not applicable - Notes: Not applicable

1,1'-oxybis(benzene) - CAS: 101-84-8

Bioaccumulation: Not applicableTest: BCF - Bioconcentrantion factor 195 - Duration: 96 hours -

Notes: Rainbow trout

Bioaccumulation: Not applicableTest: Kow - Partition coefficient 4.21 - Duration: Not applicable - Notes: Not applicable

12.4. Mobility in soil

Dipropylen glycol ether - CAS: 34590-94-8

Mobility in soil: Mobile - Test: Not applicable Not applicable - Duration: Not applicable - Notes: Not applicable

2,2'-iminodiethanol - CAS: 111-42-2

Mobility in soil: Mobile - Test: Not applicable Not applicable - Duration: Not applicable - Notes: Not applicable

1,1'-oxybis(benzene) - CAS: 101-84-8

Mobility in soil: Not mobile - Test: Not applicable 890 - Duration: Not applicable - Notes: Not applicable

Mobility in soil: Not mobile - Test: Not applicable 4600 - Duration: Not applicable - Notes: Not applicable

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

Product and its residue:

Do not dispose in the canals of wastewater, waterways and soil.

The codes indicating the type of waste are considered based on the recommendations and scheduled use of this product. Different codes may be assigned bused on the end user's use and the characteristics of the disposal.

Waste code CER/EWC (2000/532/CE), attributable to the product as:

07 06 01* aqueous solution of washing and mother liquors

H4 Irritant

Any remaining product should be disposed of with the material.

Containers/contaminated packaging

Containers, even completely empty, must not be disposed in the environment. The packigings which can not be cleaned should be disposed of as the material.

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.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

Not classified in accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

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

14.6. Special precautions for user

Not applicable

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

SECTION 15: Regulatory information

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

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)

Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Dir. 2006/8/EC

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) n. 453/2010 (Annex I)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

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

None

Where applicable, refer to the following regulatory provisions:

Regulation (EC) nr 648/2004 and CE N. 907/2006 (Detergents).

Directive 2003/105/EC ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) n° 648/2004 (detergents).

1999/13/EC (VOC directive)

Volatile Organic compounds - VOCs = 2.09 %

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.01

15.2. Chemical safety assessment

Not available

SECTION 16: Other information

Full text of phrases referred to in Section 3:

R21/22 Harmful in contact with skin and if swallowed.

R22 Harmful if swallowed.

R34 Causes burns.

R36/37/38 Irritating to eyes, respiratory system and skin.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

R50 Very toxic to aquatic organisms.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

H335 May cause respiratory irritation.

H290 May be corrosive to metals.

H312 Harmful in contact with skin.

H400 Very toxic to aquatic life.

H373 May cause damage to organs through prolonged or repeated exposure.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

This document was prepared by a competent person who has received appropriate training.

This MSDS cancels and replaces any preceding release.

Where applicable, refer to the following regulatory provisions:

Council Directive 67/548/EEC (Classification, packaging and labelling of dangerous substances) and subsequent amendments; Regulation (EC) n°1272/2008; Regulation (EC) N. 790/2009 (annex VI), Regulation (EC) n. 1907/2006 (REACH).

Commmission Directive 1999/45/EC (Classification, packaging and labelling of dangerous preparation) and subsequent amendments; Commmission Directive n. 2006/8/CE.

Regulation (EC) nr 648/2004 and CE N. 907/2006 (Detergents).

Directive 2003/105/EC ('Activities linked to risks of serious accidents') and subsequent amendments. Directive 2013/10/EU (aerosols) amending Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) n° 1272/2008 on classification, labelling and packaging of substances and mixtures and subsequent amendments.

Regulation (EC) No 1223/2009 on cosmetic products and subsequent amendments.

Regulation (EU) No 126/2013 amending Annex XVII to Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and subsequent amendments.

Regulation (EC) N. 304/2003 and subsequent amendments. Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products and subsequent amendments.

Directives 91/156/CEE, 91/689/CEE, 94/62/CE (Disposal of waste) and subsequent amendments.

The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), current edition.

regulations IATA/ICAO = Dangerous Goods Regulations by air, current edition.

RID = Regulations concerning the International Carriage of Dangerous Goods by Rail, current edition.

IMDG Code = International Maritime Dangerous Goods Code produced by the International Maritime Organization (IMO), current edition.

Directive 91/271/EEC and 91/676/CEE (protection of waters) and subsequent amendments.

Main bibliographic sources:

ESIS: European chemical Substances Information System and Environmental hazard classification.

Occupational exposure limit values (Commission Directives 2000/39/EC and 2006/15/CE)

ACGIH - TLV's for 2010

NIOSH - Registry of toxic effects of chemical substances (1983)

Material Safety Data Sheets of chemicals, REACH database

Material Safety Data Sheet and Technical Data of raw material as by Supplier

The ISS National Inventory of Chemical Substances (INSC)

Abbreviations and acronyms:

TLV-TWA = Threshold Limit Value- time-weighed average, 8-hour workday, 40-hour workweek;

TLV-STEL-15 min = Threshold Limit Values - Short Term Exposure Limit; TLV-C = Ceiling exposure limit;

Notes: IBE= Biological Exposure Indices; SEN= sensitizer; Skin= Can be absorbed through the skin.

Carcinogenicity categories: A1 / A2 = confirmed / suspected human carcinogen; A3 = Animal carcinogen; A4 / A5 = Not Classificable/not suspected as a human carcinogen. ACGIH = American Conference on Governmental Industrial Hygienists. OEL =Occupational Exposure Limit. VLPE = Occupational Exposure Limit Values. LTE =long term exposure, STE=short term exposure.

n.av.= Not Available, n.a. = not applicable; LD50=lethal dose (solids and liquids), LC50=lethal concentration (gases) that will kill 50% of the test animals; ADR= European Agreement concerning the International Carriage of Dangerous Goods by Road. Regulations IATA/ICAO = Dangerous Goods Regulations by air, current edition.

RID = Regulations concerning the International Carriage of Dangerous Goods by Rail, current edition. IMDG Code = International Maritime Dangerous Goods Code produced by the International Maritime Organization (IMO), current edition.

PBT = Persistent, Bioaccumulative and Toxic substances.; vPvB = very Persistent and very Bioaccumulative substances; CMR = Carcinogenic, mutagenic or reproduction toxic substances.

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.