Safety Data Sheet dated 2/8/2017, version 4 In compliance with Regulation (EC) 2015/830

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

1.1. Product identifier

Mixture identification:

Trade name: ACC 2210

Product type: ALKALINE CLEANER FOR ALL SURFACES

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:

None in particular

1.3. Details of the supplier of the safety data sheet

Supplier:

AirChem Consumables, PO Box 261503, JAFZA, Dubai, UAE. Tel:

+971-4-881 8084, Fax: +971-4-881 6022, Email: airacc@acc.ae

Competent person responsible for the safety data sheet:

airacc@acc.ae

1.4. Emergency telephone number

AirChem Consumables, Tel: +971-4-881 8084, Fax: +971-4-881 6022, Email:

airacc@acc.ae (From Sunday to Thursday from 8:00 to 18:00)

A list of Poison Control Centers is available at the following link:

http://www.who.int/gho/phe/chemical safety/poisons centres/en/

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- ♦ Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.
- ♦ Danger, Eye Dam. 1, Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P280 Wear protective gloves/clothing and eye/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/ shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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 or doctor.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contains

Sodium metasilicate

Fatty alchool C12 -15 ethoxylated

Sodium alkyl sulfate

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

Declaration of ingredients according to Detergent Regulation 648/2004: anionic surfactants, amphoteric surfactants, non-ionic < 5 % surfactants

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 the CLP regulation and related classification: 5-10 % Dipropylen glycol Monomethyl ether

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

Substance with a Union 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

3.2/1A Skin Corr. 1A H314

◆ 3.8/3 STOT SE 3 H335

2.16/1 Met. Corr. 1 H290

1-5 % Fatty alchool C12 -15 ethoxylated

CAS: 68131-39-5

3.1/4/Oral Acute Tox. 4 H302

♦ 3.3/1 Eye Dam. 1 H318

4.1/A1 Aquatic Acute 1 H400

1-5 % Sodium alkyl sulfate

CAS: 126-92-1, EC: 204-812-8

3.2/2 Skin Irrit. 2 H315

♦ 3.3/1 Eye Dam. 1 H318

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.

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

None

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

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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 Monomethyl ether - CAS: 34590-94-8

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ACGIH - TWA mg/m3(8h): 606 - LTE ppm: 100 - STEL mg/m3(15 min): 909 - STE ppm: 150 - Behaviour: Binding - Notes: Skin - Critical effects: respiratory and eye irritation, central nervous system EU - TWA mg/m3(8h): 308 - LTE ppm: 50 - Behaviour: Binding - Notes: Skin Sodium metasilicate - CAS: 10213-79-3 ACGIH - STEL mg/m3(15 min): 2 - Notes: Analogy with NaOH **DNEL Exposure Limit Values** Dipropylen glycol Monomethyl ether - CAS: 34590-94-8 Worker Professional: 1.67 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects Worker Professional: 310 mg/m3 - Consumer: 3.2 - U.M.: mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Worker Professional: 65 mg/kg - Consumer: 15 - U.M.: mg/kg - Exposure: Human Dermal - 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 PNEC Exposure Limit Values Dipropylen glycol Monomethyl ether - CAS: 34590-94-8 Target: Fresh Water - Value: 19 mg/l Target: Marine water - Value: 1.9 mg/l Target: Freshwater sediments - Value: 70.2 mg/kg Target: Marine water sediments - Value: 7.02 mg/kg Target: Occasional issue - Value: 190 mg/l Target: Microorganisms in sewage treatments - Value: 4168 mg/l 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 8.2. Exposure controls Eye protection: Use close fitting safety goggles, don't use eye lens. Protection for skin: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC

or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Clear liquid with light deposit		
Odour:	n.av.		
Odour threshold:	n.av. mg/m3		
pH:	12		
Melting point / freezing point:	< 0 °C		
Initial boiling point and boiling range:	>100 °C		
Flash point:	>60 °C		
Evaporation rate:	na		
Solid/gas flammability:	na		
Upper/lower flammability or explosive limits:	n.av. % v/v		
Vapour pressure:	3.2 kPa		
Vapour density (air=1):	> 1		
Relative density:	1.1 g/ml		
Solubility in water:	Complete		
Solubility in oil:	n.av.		
Partition coefficient (n-octanol/water):	n.av.		
Auto-ignition temperature:	n.av. °C		
Decomposition temperature:	n.av. °C		
Viscosity:	n.av. mPa.s		
Explosive properties:	Not explosive		
Oxidizing properties:	Not oxidant		

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Complete in water		

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

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 halogenated organic substances, and elementary metals.

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:

Not applicable

Toxicological information of the main substances found in the product:

Dipropylen glycol Monomethyl ether - CAS: 34590-94-8

Type: a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat - Op.: = - Value: 5135 - U.M.: mg/kg Test: LD50 - Route: Skin - Species: Rabbit - Op.: > - Value: 13000 - U.M.: mg/kg

Test: LC50 - Route: Inhalation - Species: Rat - Op.: = - Value: 55 - U.M.: mg/l - Duration:

4 hours

Test: LC50 - Route: Inhalation - Species: Rat - Op.: > - Value: 275 - U.M.: Ppm - Duration:

7 hours

Sodium metasilicate - CAS: 10213-79-3

Type: a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat - Op.: > - Value: 1152 - U.M.: mg/kg

Test: LD50 - Route: Oral - Species: Rat - Op.: < - Value: 1349 - U.M.: mg/kg

Test: LD50 - Route: Oral - Species: Mouse - Op.: > - Value: 1152 - U.M.: mg/kg

Test: LD50 - Route: Oral - Species: Mouse - Op.: < - Value: 1349 - U.M.: mg/kg

Test: LC50 - Route: Inhalation - Species: Rat - Op.: > - Value: 2.06 - U.M.: g/m3 -

Duration: 4 hours

Test: LD50 - Route: Skin - Species: Rat - Op.: > - Value: 5000 - U.M.: mg/kg - Notes: bw

Type: b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rat - Op.: Positive - Source: OECD 404

Type: c) serious eye damage/irritation:

Test: Eye Irritant - Route: Eyes - Species: Rabbit - Op.: Positive - Source: OECD 405

Fatty alchool C12 -15 ethoxylated - CAS: 68131-39-5

Type: a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat - Op.: > - Value: 300 - U.M.: mg/kg

Test: LD50 - Route: Skin - Species: Rabbit - Op.: > - Value: 2000 - U.M.: mg/kg

Type: b) skin corrosion/irritation:

Test: Skin Irritant - Op.: Negative

Type: c) serious eye damage/irritation:

Test: Eye Irritant - Route: Eyes - Species: Rabbit - Op.: Yes

Sodium alkyl sulfate - CAS: 126-92-1

Type: a) acute toxicity:

```
Test: LD50 - Route: Oral - Species: Rat - Op.: > - Value: 2000 - U.M.: mg/kg
Test: LD50 - Route: Skin - Species: Rabbit - Op.: > - Value: 500 - U.M.: mg/kg
Test: LC50 - Route: Inhalation - Species: Mouse - Op.: > - Value: 5 - U.M.: mg/l -
Duration: 4 hours

Type: b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin - Species: Rabbit - Op.: Positive

Type: c) serious eye damage/irritation:
Test: Eye Irritant - Route: Eyes - Species: Rabbit - Op.: Positive

Type: e) germ cell mutagenicity:
Test: Mutagenesis - Species: Rat - Op.: = - Value: 300 - U.M.: mg/kg - Source: NOEL -
Notes: OECD 414

Type: g) reproductive toxicity:
Test: Reproductive Toxicity - Route: Oral - Species: Rat - Op.: = - Value: 703 - U.M.:
mg/kg - Source: NOEL - Notes: OECD 416
```

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- 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;

<u>i) aspiration hazard.</u>

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:

Dipropylen glycol Monomethyl ether - CAS: 34590-94-8

```
Type: a) Aquatic acute toxicity:
```

Endpoint: LC50 - Species: Fish - Op.: > - Value: 10000 - U.M.: mg/l - Duration h: 96 Endpoint: LC50 - Species: Fish - Op.: > - Value: 1000 - U.M.: mg/l - Duration h: 96 - Notes: Poecilia reticulata Endpoint: EC50 - Species: Daphnia - Op.: = - Value: 1919 - U.M.: mg/l - Duration h: 48 - Notes: Daphnia magna Endpoint: EC50 - Species: Algae - Op.: > - Value: 969 - U.M.: mg/l - Duration h: 72

Notes: Selenastrum capricornutum
 Endpoint: EC50 - Species: Algae - Op.: > - Value: 969 - U.M.: mg/l - Duration h: 96

Sodium metasilicate - CAS: 10213-79-3

Type: a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish - Op.: = - Value: 210 - U.M.: mg/l - Duration h: 96 - Notes: Brachydanio rerio

Endpoint: LC50 - Species: Fish - Op.: = - Value: 2320 - U.M.: mg/l - Duration h: 96 -

Notes: Gambusia affinis Endpoint: EC50 - Species: Daphnia - Op.: = - Value: 1700 - U.M.: mg/l - Duration h:

48 - Notes: Daphnia magna Endpoint: EC50 - Species: Algae - Op.: = - Value: 207 - U.M.: mg/l - Duration h: 72 - Notes: Scenedesmus subspicatus

Fatty alchool C12 -15 ethoxylated - CAS: 68131-39-5

Type: a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish - Op.: < - Value: 1 - U.M.: mg/l - Duration h: 96 Endpoint: LC50 - Species: Fish - Op.: > - Value: 0.1 - U.M.: mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia - Op.: < - Value: 1 - U.M.: mg/l - Duration h: 48 Endpoint: EC50 - Species: Daphnia - Op.: > - Value: 0.1 - U.M.: mg/l - Duration h: 48

Type: e) Plant toxicity:

Endpoint: EC50 - Species: Algae - Op.: < - Value: 1 - U.M.: mg/l - Duration h: 72 Endpoint: EC50 - Species: Algae - Op.: > - Value: 0.1 - U.M.: mg/l - Duration h: 72

Sodium alkyl sulfate - CAS: 126-92-1

Type: a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish - Op.: > - Value: 1 - U.M.: mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia - Op.: > - Value: 1 - U.M.: mg/l - Duration h: 48 Endpoint: EC50 - Species: Daphnia - Op.: < - Value: 10 - U.M.: mg/l - Duration h: 48

Endpoint: EC50 - Species: Bacteria - Op.: > - Value: 1 - U.M.: mg/l - Duration h: 120

12.2. Persistence and degradability

Dipropylen glycol Monomethyl ether - CAS: 34590-94-8

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

Fatty alchool C12 -15 ethoxylated - CAS: 68131-39-5

Biodegradability: Readily biodegradable - Test: Biochemical oxygen demand - Duration: 28 days - %: Not applicable - Notes: Not applicable

Sodium alkyl sulfate - CAS: 126-92-1

Biodegradability: Readily biodegradable - Test: Dissolved organic carbon - Duration: 28 days - %: 90 - 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

Dipropylen glycol Monomethyl ether - CAS: 34590-94-8

Bioaccumulation: Low bioaccumulative potential - Test: Kow - Partition coefficient 0.004 - Duration: Not applicable - Notes: log Kpw

Sodium metasilicate - CAS: 10213-79-3

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

Fatty alchool C12 -15 ethoxylated - CAS: 68131-39-5

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

Sodium alkyl sulfate - CAS: 126-92-1

Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient 4 - Duration: Not applicable - Notes: low

Bioaccumulation: Not bioaccumulative - Test: BCF - Bioconcentrantion factor 73 -

Duration: Not applicable - Notes: low

12.4. Mobility in soil

Dipropylen glycol Monomethyl ether - CAS: 34590-94-8

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

Fatty alchool C12 -15 ethoxylated - CAS: 68131-39-5

Mobility in soil: Mobile - Test: Not applicable Not applicable - 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.

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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

HP8

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 packingings 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

ADR-UN Number: 1760 IATA-UN Number: 1760 IMDG-UN Number: 1760

14.2. UN proper shipping name

ADR-Shipping Name: CORROSIVE LIQUID, N.O.S.(Sodium metasilicate) IATA-Shipping Name: CORROSIVE LIQUID, N.O.S.(Sodium metasilicate) IMDG-

Shipping Name: CORROSIVE LIQUID, N.O.S.(Sodium metasilicate)

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): (E)

IATA-Passenger Aircraft: 852
IATA-Subsidiary risks: IATA-Cargo Aircraft: 856
IATA-S.P.: A3 A803
IATA-ERG: 8L

IMDG-EmS: F-A , S-B

IMDG-Subsidiary risks: -

IMDG-Stowage and handling: Category A SW2

IMDG-Segregation: -

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

SECTION 15: Regulatory information

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

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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)

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.

Volatile Organic compounds - VOCs = 8.00 %

Volatile Organic compounds - VOCs = 88.00 g/l

Volatile CMR substances = 0.00 %

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

Organic Carbon - C = 0.05

Where applicable, refer to the following regulatory provisions:

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

Dir. 2004/42/EC (VOC directive)

Seveso III category according to Annex 1, part 1
Product belongs to category: Not applicable

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:

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H315 Causes skin irritation.

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/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
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

Paragraphs modified from the previous revision:

SECTION 3: Composition/information on ingredients

SECTION 8: Exposure controls/personal protection

SECTION 9: Physical and chemical properties

SECTION 12: Ecological information SECTION 14: Transport information

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

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).

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

Directive 2012/18/EU (Seveso III)
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.

EU Regulament 1357/2014 (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

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

Main bibliographic sources:

ACGIH - Threshold Limit Values - 2015

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

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.
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.