

Safety Data Sheet dated 19/1/2022, version 8

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

1.1. Product identifier

Mixture identification:

Trade name: ZEN ESSENCE MING

Trade code: 1840

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

Recommended use:

Car air freshener

1.3. Details of the supplier of the safety data sheet

Supplier:

Arexons S.p.A.

via Antica di Cassano, 23, 20063

Cernusco sul Naviglio (MI), Italy

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Competent person responsible for the safety data sheet:

arexons@arexons.it

1.4. Emergency telephone number

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

In Ireland: Beaumont Hospital - National Poisons Information Centre 01 809 2166 (7days, 8:00 -

22:00)

In South Africa: Poison Information Helpline 0861 555 777

In Malta: emergency number 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

- ◆ Warning, Skin Irrit. 2, Causes skin irritation.
- Warning, Eye Irrit. 2, Causes serious eye irritation.
- Warning, Skin Sens. 1, May cause an allergic skin reaction. Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

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P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

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

Special Provisions:

EUH208 Contains 3,7-dimethyl-3-octanol. May produce an allergic reaction.

EUH208 Contains Eucalyptol. May produce an allergic reaction.

EUH208 Contains 2-Methylundecanal. May produce an allergic reaction.

EUH208 Contains DELTA DAMASCONE. May produce an allergic reaction.

Contains

Linalyl acetate

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

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

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:

>= 70% - < 80% DIPROPYLENEGLYCOL MONOMETHYLETHER

REACH No.: 01-2119450011-60, CAS: 34590-94-8, EC: 252-104-2

Substance with a Union workplace exposure limit.

>= 7% - < 10% 1-HEXANOL,3,5,5-TRIMETHYL-,1 ACETATE

REACH No.: 01-2119972325-34, CAS: 58430-94-7, EC: 261-245-9

3.2/2 Skin Irrit. 2 H315

4.1/C2 Aquatic Chronic 2 H411

>= 5% - < 7% 2,6-dimethyloct-7-en-2-ol

REACH No.: 01-2119457274-37, CAS: 18479-58-8, EC: 242-362-4

3.2/2 Skin Irrit. 2 H315

◆ 3.3/2 Eye Irrit. 2 H319

>= 3% - < 5% 2,6,6,8-TETRAMETHYLTRICYCLO(5,3,1,0UNDECA)8-YL ACETATE

CAS: 77-54-3, EC: 201-036-1

4.1/C2 Aquatic Chronic 2 H411

>= 3% - < 5% Linalyl acetate

REACH No.: 01-2119454789-19, CAS: 115-95-7, EC: 204-116-4

3.2/2 Skin Irrit. 2 H315

3.4.2/1 Skin Sens. 1 H317

◆ 3.3/2 Eye Irrit. 2 H319

>= 3% - < 5% 2,6-Dimethyl-2-heptanol

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REACH No.: 01-2120275178-48, CAS: 13254-34-7, EC: 236-244-1

3.2/2 Skin Irrit. 2 H315
 3.3/2 Eye Irrit. 2 H319

>= 3% - < 5% 3,7-dimethyl-3-octanol

REACH No.: 01-2119454788-21, CAS: 78-69-3, EC: 201-133-9

① 3.2/2 Skin Irrit. 2 H315 ① 3.4.2/1 Skin Sens. 1 H317

4 3.3/2 Eye Irrit. 2 H319

>= 0.5% - < 1% Allyl (cyclohexyloxy)acetate

CAS: 68901-15-5, EC: 272-657-3

4.1/A1 Aquatic Acute 1 H400

4.1/C1 Aquatic Chronic 1 H410

>= 0.5% - < 1% Eucalyptol

REACH No.: 01-2119967772-24, CAS: 470-82-6, EC: 207-431-5

2.6/3 Flam. Liq. 3 H226
 3.4.2/1 Skin Sens. 1 H317

>= 0.1% - < 0.25% 2-Methylundecanal

REACH No.: 01-2119969443-29, CAS: 110-41-8, EC: 203-765-0

1 3.2/2 Skin Irrit. 2 H315

3.4.2/1B Skin Sens. 1B H317

4.1/A1 Aquatic Acute 1 H400 M=1.

♦ 4.1/C1 Aquatic Chronic 1 H410 M=1.

>= 0.02% - < 0.05% DELTA DAMASCONE

CAS: 57378-68-4, EC: 260-709-8

◆ 3.1/4/Oral Acute Tox. 4 H302

♦ 4.1/A1 Aquatic Acute 1 H400

3.2/2 Skin Irrit. 2 H315

◆ 3.4.2/1A Skin Sens. 1A H317

4.1/C1 Aquatic Chronic 1 H410

20 ppb toluene

REACH No.: 01-2119471310-51, CAS: 108-88-3, EC: 203-625-9

◆ 2.6/2 Flam. Liq. 2 H225

◆ 3.8/3 STOT SE 3 H336

♦ 3.10/1 Asp. Tox. 1 H304

◆ 3.2/2 Skin Irrit. 2 H315

3.7/2 Repr. 2 H361

◆ 3.9/2 STOT RE 2 H373

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

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,

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then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

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

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

Appropriate Extinguishing Media:

To carbon dioxide.

To water.

Not Recommended Extinguishing Media:

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.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.

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Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Do not store this material near food and drinks.

Keep away from food, drink and feed.

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

DIPROPYLENEGLYCOL MONOMETHYLETHER - CAS: 34590-94-8

EU - TWA(8h): 308 mg/m3, 50 ppm - Notes: Skin

ACGIH - TWA(8h): 100 ppm - STEL: 150 ppm - Notes: Skin - Eye and URT irr, CNS

impair

toluene - CAS: 108-88-3

EU - TWA(8h): 192 mg/m3, 50 ppm - STEL: 384 mg/m3, 100 ppm - Notes: Skin

ACGIH - TWA(8h): 20 ppm - Notes: A4, BEI - Visual impair, female repro, pregnancy loss

DNEL Exposure Limit Values

2,6-dimethyloct-7-en-2-ol - CAS: 18479-58-8

Worker Industry: 73.5 mg/m3 - Consumer: 21.7 mg/m3 - Exposure: Human Inhalation -

Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 20.8 mg/kg - Consumer: 12.5 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 12.5 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

- Notes: ECHA

Linalyl acetate - CAS: 115-95-7

Worker Industry: 2.75 mg/m3 - Consumer: 0.68 mg/m3 - Exposure: Human Inhalation -

Frequency: Long Term, systemic effects - Notes: ECHA

Worker Industry: 2.5 mg/kg - Consumer: 1.25 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects - Notes: ECHA

Consumer: 0.2 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects -

Notes: ECHA

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Safety goggles.

Eye glasses with side protection.

Compliant with EN 166

Protection for skin:

protective clothing

Protection for hands:

PVC (polyvinyl chloride).

Neoprene.

Nitrile.

Compliant with EN 374.

Respiratory protection:

Not required under normal conditions of use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

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None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:	
Physical state:	Liquid			
Colour:	Light yellow			
Odour:	Characteristic			
Melting point/freezing point:	N.A.			
Boiling point or initial boiling point and boiling range:	N.A.			
Flammability:	N.A.			
Lower and upper explosion limit:	N.A.			
Flash point:	>61°C			
Auto-ignition temperature:	N.A.			
Decomposition temperature:	N.A.			
pH:	N.A.			
Kinematic viscosity:	N.A.			
Solubility in water:	N.A.			
Solubility in oil:	N.A.			
Partition coefficient n-octanol/water (log value):	N.A.			
Vapour pressure:	N.A.			
Density and/or relative density:	0,925			
Relative vapour density:	N.A.			
Particle characteristics:				
Particle size:	N.A.			

9.2. Other information

No other relevant information



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 hazard classes as defined in Regulation (EC) No 1272/2008 Toxicological information of the product:

ZEN ESSENCE MING ML 4,5

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

The product is classified: Skin Irrit. 2 H315

c) serious eye damage/irritation

The product is classified: Eye Irrit. 2 H319

d) respiratory or skin sensitisation

The product is classified: Skin Sens. 1 H317

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

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

DIPROPYLENEGLYCOL MONOMETHYLETHER - CAS: 34590-94-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 8740 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 9510 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat 3404 mg/kg

1-HEXANOL,3,5,5-TRIMETHYL-,1 ACETATE - CAS: 58430-94-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 4250 mg/kg - Notes: OECD 401

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg - Notes: OECD 402

2,6-dimethyloct-7-en-2-ol - CAS: 18479-58-8



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a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 3600 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg
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g) reproductive toxicity:

Test: NOAEL 1000 mg/kg - Notes: maternal, foetal

Linalyl acetate - CAS: 115-95-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 9000 mg/kg Test: LD50 - Route: Oral - Species: Mouse = 12000 mg/kg Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

g) reproductive toxicity:

Test: NOAEL 500 mg/kg

- 3,7-dimethyl-3-octanol CAS: 78-69-3
- c) serious eye damage/irritation:

Test: Eye Irritant Positive

d) respiratory or skin sensitisation:

Test: OECD TG 403 - Route: Inhalation = 0.885 mg/m3

e) germ cell mutagenicity:

Test: NOAEL - Species: esseri umani 500 mg/kg - Notes: maternal Test: NOAEL - Species: esseri umani 1000 mg/kg - Notes: foetal

g) reproductive toxicity:

Test: NOAEL 500 mg/kg

Allyl (cyclohexyloxy)acetate - CAS: 68901-15-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 620 mg/kg Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

Eucalyptol - CAS: 470-82-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 4.3 g/kg Test: LD50 - Route: Skin - Species: Rat > 2 g/kg

2-Methylundecanal - CAS: 110-41-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

DELTA DAMASCONE - CAS: 57378-68-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 1821 mg/kg

toluene - CAS: 108-88-3

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

Test: LD50 - Route: Inhalation - Species: Rat > 20 mg/l - Duration: 4h

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. DIPROPYLENEGLYCOL MONOMETHYLETHER - CAS: 34590-94-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 1000 mg/l - Duration h: 96 Endpoint: LC50 - Species: Daphnia = 1919 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae > 969 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

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Endpoint: NOEC - Species: Daphnia 0.5 mg/l - Duration h: 72
      1-HEXANOL, 3, 5, 5-TRIMETHYL-, 1 ACETATE - CAS: 58430-94-7
      a) Aquatic acute toxicity:
            Endpoint: EC50 - Species: Daphnia > 5.4 mg/l - Duration h: 24 - Notes: OECD 202
            Endpoint: EC50 - Species: Algae > 3.8 mg/l - Duration h: 72
            Endpoint: LC50 - Species: Fish = 7.7 mg/l - Duration h: 96 - Notes: OECD 203
      2,6-dimethyloct-7-en-2-ol - CAS: 18479-58-8
      a) Aquatic acute toxicity:
            Endpoint: LC50 - Species: Fish > 4.81 mg/l - Duration h: 96
            Endpoint: LC50 - Species: Daphnia = 5.70 mg/l - Duration h: 48
            Endpoint: EC50 - Species: Algae = 3.88 mg/l - Duration h: 96
      Linalyl acetate - CAS: 115-95-7
      a) Aquatic acute toxicity:
            Endpoint: LC50 - Species: Fish = 11 mg/l - Duration h: 96
            Endpoint: EC50 - Species: Daphnia = 15 mg/l - Duration h: 48
            Endpoint: NOEC - Species: Algae = 9.6 mg/l - Duration h: 72
      Allyl (cyclohexyloxy)acetate - CAS: 68901-15-5
      a) Aquatic acute toxicity:
            Endpoint: EC50 - Species: Daphnia 11.3 mg/l - Duration h: 48
      Eucalyptol - CAS: 470-82-6
      a) Aquatic acute toxicity:
            Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48
            Endpoint: EC50 - Species: Algae > 74 mg/l - Duration h: 72
            Endpoint: LC50 - Species: Fish = 57 mg/l - Duration h: 96
      2-Methylundecanal - CAS: 110-41-8
      a) Aquatic acute toxicity:
            Endpoint: LC50 - Species: Fish = 0.35 mg/l - Duration h: 96
            Endpoint: EC50 - Species: Daphnia = 0.21 mg/l - Duration h: 48
            Endpoint: EC50 - Species: Algae = 0.18 mg/l - Duration h: 72
            Endpoint: NOEC - Species: Algae = 0.089 mg/l - Duration h: 72
      DELTA DAMASCONE - CAS: 57378-68-4
      a) Aquatic acute toxicity:
            Endpoint: LC50 - Species: Fish 0.977 mg/l - Duration h: 96
12.2. Persistence and degradability
      2,6-dimethyloct-7-en-2-ol - CAS: 18479-58-8
            Biodegradability: Readily biodegradable - Test: BIOGDG06 - Duration: 28gg - %: 72.1
      Linalyl acetate - CAS: 115-95-7
            Biodegradability: Readily biodegradable - Test: BIOGDG06 - Duration: 28gg - %: 76
      Eucalyptol - CAS: 470-82-6
            Biodegradability: Readily biodegradable - Test: BIOGDG10 - Duration: 28gg - %: 82
      2-Methylundecanal - CAS: 110-41-8
            Biodegradability: Readily biodegradable - Test: BIOGDG10 - Duration: 28gg - %: 60
12.3. Bioaccumulative potential
      toluene - CAS: 108-88-3
            Bioaccumulation: Bioaccumulative - Test: BCF - Bioconcentrantion factor 90
12.4. Mobility in soil
      N.A.
12.5. Results of PBT and vPvB assessment
      vPvB Substances: None - PBT Substances: None
12.6. Endocrine disrupting properties
      No endocrine disruptor substances present in concentration >= 0.1%
12.7. Other adverse effects
      None
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. Additional disposal information:

Reuse if possible. Act in accordance with the local and national laws in force.

SECTION 14: Transport information

14.1. UN number or ID number

14.2. UN proper shipping name

ADR-Shipping Name: *ENTER PROPER SHIPPING NAME*
IATA-Shipping Name: *ENTER PROPER SHIPPING NAME*
IMDG-Shipping Name: *ENTER PROPER SHIPPING NAME*

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Maritime transport in bulk according to IMO instruments

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) n. 2020/878

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

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

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 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:

Restriction 40

Restriction 48

Restriction 75



Volatile Organic compounds - VOCs = 9.99 %
Volatile Organic compounds - VOCs = 99.90 g/Kg

Volatile Organic compounds - VOCs = 92.41 g/l

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. Substances for which a Chemical Safety Assessment has been carried out:

None

SECTION 16: Other information

Text of phrases referred to under heading 3:

H315 Causes skin irritation.

H411 Toxic to aquatic life with long lasting effects.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H226 Flammable liquid and vapour.

H225 Highly flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H361 Suspected of damaging fertility or the unborn child.

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

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Skin Sens. 1B	3.4.2/1B	Skin Sensitisation, Category 1B
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure,



		Category 3
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

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

SECTION 3: Composition/information on ingredients

SECTION 11: Toxicological information SECTION 12: Ecological information SECTION 14: Transport information SECTION 15: Regulatory information SECTION 16: Other 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 Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

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

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

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

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

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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.

NA: Not applicable

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.