



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

1.1. Product identifier

Name: MANDARINE CYPRESS
Code: PRX011609
CAS number: N.A.
EC number: N.A.

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

Recommended use:

Flavouring substances and mixtures for professional use.

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Uses advised against:

Product not intended for direct consumer use. Not for pharmaceutical or medical purpose.

1

1.3. Details of the supplier of the safety data sheet

Company: MOELLHAUSEN S.p.A.
Via Torri Bianche, 9 - 20059 Vimercate (MI), Italy
Tel. +39 039.685.6262 - Fax +39 039.685.6263

Competent person responsible for the safety data sheet: regulatory@moellhausen.com

1.4. Emergency telephone number

Poison center - Niguarda Hospital - Milan - Tel. +39 02.661.010.29

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 2, Toxic 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.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash ... Thoroughly after handling.
- P273 Avoid release to the environment.

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P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P391 Collect spillage.

Special Provisions:

None

Contains

Limonene

VERTOCITRAL: May produce an allergic reaction.

(+)-Pin-2(3)-ene: May produce an allergic reaction.

CITRONITRILE: May produce an allergic reaction.

ALPHA PINENE: May produce an allergic reaction.

3,7,7-Trimetilbicyclo[4.1.0]ept-3-ene: May produce an allergic reaction.

6,6-Dimethyl-2-methylenebicyclo[3.1.1]heptane: May produce an allergic reaction.

LIMONENE L-70: May produce an allergic reaction.

(E)-1-(2,6,6-Trimethyl-2-cyclohexenyl)-2-buten-1-one: May produce an allergic reaction.

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

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None










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:

Qty	Name	Ident. Number	Classification
>= 5% - < 10%	Limonene	Index number: CAS: EC: 601-029-00-7 5989-27-5 227-813-5	 2.6/3 Flam. Liq. 3 H226  3.2/2 Skin Irrit. 2 H315  3.4.2/1 Skin Sens. 1 H317  4.1/C1 Aquatic Chronic 1 H410
>= 5% - < 10%	VERTOCITRAL	CAS: EC: 68039-49-6 268-264-1	 3.3/2 Eye Irrit. 2 H319  3.2/2 Skin Irrit. 2 H315  3.4.2/1 Skin Sens. 1 H317 4.1/C3 Aquatic Chronic 3 H412
>= 5% - < 10%	Diethyl propanedioate	CAS: EC: REACH No.: 105-53-3 203-305-9 01-2119886972-18	 3.3/2 Eye Irrit. 2 H319
>= 2.5% - < 5%	1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCb)	Index number: CAS: EC: REACH No.: 603-212-00-7 1222-05-5 214-946-9 01-2119488227-29	 4.1/C1 Aquatic Chronic 1 H410

>= 1% - < 2.5%	ALLYL AMYL GLYCOLATE	CAS: EC:	67634-00-8 266-803-5	⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.2/2 Skin Irrit. 2 H315
>= 1% - < 2.5%	Allyl hexanoate	CAS: EC: REACH No.:	123-68-2 204-642-4 01- 2119983573 -26	⚠ 3.1/3/Dermal Acute Tox. 3 H311 ⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 4.1/C2 Aquatic Chronic 2 H411
>= 1% - < 2.5%	1-Dodecane nitrile	CAS: EC: REACH No.:	2437-25-4 219-440-1 01- 2120743516 -53	⚠ 4.1/C1 Aquatic Chronic 1 H410
>= 1% - < 2.5%	1-decanal	CAS: EC: REACH No.:	112-31-2 203-957-4 01- 2119967771 -26	⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.3/2 Eye Irrit. 2 H319 4.1/C3 Aquatic Chronic 3 H412
< 1%	(+)-Pin-2(3)-ene	CAS: EC:	7785-70-8 232-087-8	⚠ 2.6/3 Flam. Liq. 3 H226 ⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 3.10/1 Asp. Tox. 1 H304 ⚠ 4.1/C1 Aquatic Chronic 1 H410
< 1%	CITRONITRILE	CAS: EC: REACH No.:	93893-89-1 299-682-2 01- 2120743785 -44	⚠ 3.1/4/Oral Acute Tox. 4 H302 4.1/C3 Aquatic Chronic 3 H412 ⚠ 3.4.2/1 Skin Sens. 1 H317
< 1%	ALPHA PINENE	CAS: EC: REACH No.:	7785-26-4 232-077-3 01- 2119979519 -16	⚠ 2.6/3 Flam. Liq. 3 H226 ⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 3.10/1 Asp. Tox. 1 H304 ⚠ 4.1/C1 Aquatic Chronic 1 H410
< 1%	3,7,7-Trimetilbicyclo[4.1.0]ept-3-ene	CAS: EC: REACH No.:	13466-78-9 236-719-3 01- 2119520252 -55	⚠ 2.6/3 Flam. Liq. 3 H226 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 4.1/C2 Aquatic Chronic 2 H411
< 1%	6,6-Dimethyl-2-methylenebicyclo[3.1.1]heptane	CAS: EC: REACH No.:	127-91-3 204-872-5 01- 2119519230 -54	⚠ 2.6/3 Flam. Liq. 3 H226 ⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.10/1 Asp. Tox. 1 H304
< 1%	2,6-Di-tert-butyl-p-cresol	CAS: EC: REACH No.:	128-37-0 204-881-4 01- 2119565113 -46	⚠ 4.1/C1 Aquatic Chronic 1 H410
< 1%	LIMONENE L-70	CAS:	5989-54-8	⚠ 2.6/3 Flam. Liq. 3 H226

		EC: 227-815-6	⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 4.1/C1 Aquatic Chronic 1 H410
< 1%	2,2-Dimethyl-3-methylenebicyclo [2.2.1] heptane	CAS: 79-92-5 EC: 201-234-8 REACH No.: 01-2119446293-40	⚠ 2.7/1 Flam. Sol. 1 H228 ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 4.1/C1 Aquatic Chronic 1 H410
< 1%	(E)-1-(2,6,6-Trimethyl-2-cyclohexenyl)-2-buten-1-one	CAS: 24720-09-0 EC: 246-430-4 REACH No.: 01-2120105799-47	⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.4.2/1 Skin Sens. 1 H317

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 ophthalmologist immediately.

Wash immediately with water for at least 10 minutes.

Protect uninjured eye.

In case of Ingestion:

A suspension of activated charcoal in water, or liquid paraffin may be administered.

Induce vomiting. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety-data sheet.

In case of Inhalation:

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

Ventilate the premises. The patient is to be removed immediately from the contaminated premises and made to rest in a well ventilated area. Should the patient feel unwell, OBTAIN MEDICAL ATTENTION.

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
For non emergency personnel:
Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.
For emergency responders:
Wear personal protection equipment.
- 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:
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
- 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.
Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1

Product belongs to category:	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
E2	200	500

- 7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

- 3,7,7-Trimetilbicyclo[4.1.0]ept-3-ene - CAS: 13466-78-9
ACGIH - TWA(8h): 20 ppm - Notes: DSEN, A4 - Lung irr
- 6,6-Dimethyl-2-methylenebicyclo[3.1.1]heptane - CAS: 127-91-3
ACGIH - TWA(8h): 20 ppm - Notes: DSEN, A4 - Lung irr
- 2,6-Di-tert-butyl-p-cresol - CAS: 128-37-0
ACGIH - TWA(8h): 2 mg/m³ - Notes: (IFV), A4 - URT irr

DNEL Exposure Limit Values

- 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB) - CAS: 1222-05-5
Worker Industry: 28.85 mg/kg - Exposure: Human Dermal - Frequency: Chronic effects
Worker Industry: 5.29 mg/m³ - Exposure: Human Inhalation - Frequency: Chronic effects

PNEC Exposure Limit Values

- 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB) - CAS: 1222-05-5
Target: Fresh Water - Value: 0.0044 mg/l
Target: Marine water - Value: 0.00044 mg/l
Target: Freshwater sediments - Value: 2 mg/kg
Target: Marine water sediments - Value: 0.394 mg/kg
Target: Soil (agricultural) - Value: 0.31 mg/kg

8.2. Exposure controls

The appropriate DPI choice is complete responsibility of the Employer, material safety data sheet gives only useful indications.

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:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance :	LIQUID	--	--
Odour:	CITRUS, WOODY	--	--
Colour :	PALE YELLOW	--	--
Specific gravity at 20°C:	1.025-1.045 g/(cm ³)	--	--

Refractive index at 20 °C :	1.474-1.494	--	--
Flash point:	65.0 °C	--	--
Solid/gas flammability:	Not available	--	--
Upper/lower flammability or explosive limits:	Not available	--	--
Vapour pressure:	Not available	--	--
Solubility :	H2O: INSOLUBLE ORGANIC SOLV.: SOLUBLE	--	--
Auto-ignition temperature:	Not available	--	--
Decomposition temperature:	Not available	--	--
Viscosity:	Not available	--	--
Explosive properties:	Not available	--	--
Oxidizing properties:	Not available	--	--

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	Not available	--	--
Fat Solubility:	Not available	--	--
Conductivity:	Not available	--	--
Substance Groups relevant properties	Not available	--	--

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
None
- 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:

MANDARINE CYPRESS - CAS: N.A.

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:

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB) - CAS: 1222-05-5

a) acute toxicity:

Test: LD50 - Route: Inhalation - Species: Rat > 4640 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 6500 mg/kg

(+)-Pin-2(3)-ene - CAS: 7785-70-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 3.7 g/kg

Test: LD50 - Route: Skin - Species: Rat > 5 g/kg

3,7,7-Trimetilbicio[4.1.0]ept-3-ene - CAS: 13466-78-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 4800 mg/kg

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

Diethyl phthalate - CAS: 84-66-2

LD50 oral/rat: 8600 mg/kg

LC50 inhalation/rat: 7.5 mg/l

LD50 dermal/guinea pig:>22400 mg/kg

Limonene - CAS: 5989-27-5

Oral (rat) : LD50 4400 mg/kg

Oral (mice): LD50 > 5500 mg/kg

Dermal (rabbit): LD50 >2000 mg/kg

METHYL DIHYDROJASMONATE - CAS: 24851-98-7

LD50 oral (rat) > 5000 mg/kg

LD50 dermal (rabbit) > 5000 mg/kg

Allyl hexanoate - CAS: 123-68-2
LD50 oral rat: 218 mg/kg
LD50 dermal rabbit: 300 mg/kg
STYRALLYL ACETATE - CAS: 93-92-5
LD50 oral/rat >5000 (mg/kg)
LD50 dermal/rabbit >8000 (mg/kg)
1-decanal - CAS: 112-31-2
LD50 Oral rat: 3730 uL/kg
LD50 Oral mouse: >41750 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

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

MANDARINE CYPRESS - CAS: N.A.

The product is classified: Aquatic Chronic 2 - H411

Limonene - CAS: 5989-27-5

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 33 mg/l - Duration h: 96

Endpoint: LC50 - Species: Fish = 69.6 mg/l - Duration h: 48

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB) - CAS: 1222-05-5

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 0.452 mg/l

Endpoint: EC50 - Species: Daphnia 0.9 mg/l - Duration h: 48

Endpoint: ErC50 - Species: Algae > 0.854 mg/l - Duration h: 72

Endpoint: EbC50 - Species: Algae 0.723 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish 0.068 mg/l

Endpoint: NOEC - Species: Daphnia 0.1111 mg/l

LIMONENE L-70 - CAS: 5989-54-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 80 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 17 mg/l - Duration h: 48

12.2. Persistence and degradability

Not available

12.3. Bioaccumulative potential

Not available

12.4. Mobility in soil

Not available

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

SECTION 14: Transport information



- 14.1. UN number
ADR-UN Number: 3082
IATA-UN Number: 3082
IMDG-UN Number: 3082
- 14.2. UN proper shipping name
ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Limonene, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB))
IATA-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Limonene, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB))
IMDG-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Limonene, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB))
- 14.3. Transport hazard class(es)
ADR-Class: 9
ADR - Hazard identification number: 90
IATA-Class: 9
IATA-Label: 9
IMDG-Class: 9
- 14.4. Packing group
ADR-Packing Group: III
IATA-Packing group: III
IMDG-Packing group: III
- 14.5. Environmental hazards
ADR-Environmental Pollutant: Yes
IMDG-Marine pollutant: Marine Pollutant
Most important toxic component: Limonene
- 14.6. Special precautions for user
ADR-Subsidiary hazards: -
ADR-S.P.: 274 335 375 601
ADR-Transport category (Tunnel restriction code): 3 (-)
IATA-Passenger Aircraft: 964
IATA-Subsidiary hazards: -
IATA-Cargo Aircraft: 964
IATA-S.P.: A97 A158 A197
IATA-ERG: 9L
IMDG-EmS: F-A , S-F
IMDG-Subsidiary hazards: -
IMDG-Stowage and handling: Category A
IMDG-Segregation: -
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not available

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)
 Regulation (EC) n. 1272/2008 (CLP)
 Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 Regulation (EU) 2015/830
 Regulation (EU) n. 286/2011 (ATP 2 CLP)
 Regulation (EU) n. 618/2012 (ATP 3 CLP)
 Regulation (EU) n. 487/2013 (ATP 4 CLP)
 Regulation (EU) n. 944/2013 (ATP 5 CLP)
 Regulation (EU) n. 605/2014 (ATP 6 CLP)
 Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 Regulation (EU) n. 2016/918 (ATP 8 CLP)
 Regulation (EU) n. 2016/1179 (ATP 9 CLP)
 Regulation (EU) n. 2017/776 (ATP 10 CLP)
 Regulation (EU) n. 2018/699 (ATP 11 CLP)

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

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: E2

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:

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H411 Toxic to aquatic life with long lasting effects.

H304 May be fatal if swallowed and enters airways.

H228 Flammable solid.

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Flam. Sol. 1	2.7/1	Flammable solid, Category 1
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3

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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
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 2: Hazards identification
 SECTION 3: Composition/information on ingredients
 SECTION 6: Accidental release measures
 SECTION 7: Handling and storage
 SECTION 8: Exposure controls/personal protection
 SECTION 9: Physical and chemical properties
 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 2, H411	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

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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.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.