Safety Data Sheet dated 10/12/2019, version 3
Regulation (EU) 2015/830

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

1.1. Product identifier

Identification of the mixture:

Trade name: FUTURA

Trade code: 668.001

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

Polyurethane enamel

1.3. Details of the supplier of the safety data sheet

Company:

BOERO BARTOLOMEO S.p.A. - Via Macaggi 19 - 16121 Genova - Tel. +39 010 55001 - Fax +39 010 5500305 - CF/P. IVA/REG. IMPRESE DI GENOVA 00267120103

Competent person responsible for the safety data sheet:

sicurezzaprodotti@boero.it

1.4. Emergency telephone number

BOERO BARTOLOMEO S.p.A. - Tel.+39 010 55001

opening hours: Monday - Tuesday 9.00 am - 5.00 pm

UK: in an emergency the enquirer should call NHS 111/24/Direct (free-to-call medical helplines) or a doctor.

MALTA: tel. 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Flam. Liq. 3, H226 Flammable liquid and vapour.

Skin Sens. 1, H317 May cause an allergic skin reaction.

Aquatic Chronic 3, H412 Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictograms:

Warning

Hazard statements:

H226 Flammable liquid and vapour.

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.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

P370+P378 In case of fire use CO2 or chemical powder. Never use water.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container according to local regulations.

Special Provisions:

PROF For professional use only.

Contains

Hydroxyphenyl-benzotriazole derivatives - EC number 400-830-7
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate: May produce an allergic reaction.
fatty acids, C14-C18 and C16-C18-unsatured, maleated: May produce an allergic reaction.

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

None

2.3. Other hazards

Adverse physicochemical, human health and environmental effects:

The main adverse physical-chemical effects for human health and the environment are listed in accordance with Sections 9 to 12 of the safety data sheet

vPvB Substances: None - PBT Substances: None

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:

>= 30% - < 35% titanium dioxide

REACH No.: 01-2119489379-17-XXXX, CAS: 13463-67-7, EC: 236-675-5
Substance with a Union workplace exposure limit.

>= 12.5% - < 15% 2-methoxy-1-methylethyl acetate

REACH No.: 01-2119475791-29-XXXX, Index number: 607-195-00-7, CAS: 108-65-6, EC: 203-603-9
Flam. Liq. 3 H226 Flammable liquid and vapour.

>= 4% - < 5% 2-methoxy-1-methylethyl acetate

REACH No.: 01-2119475791-29-XXXX, Index number: 607-195-00-7, CAS: 108-65-6, EC: 203-603-9
Flam. Liq. 3 H226 Flammable liquid and vapour.
STOT SE 3 H336 May cause drowsiness or dizziness.

>= 3% - < 4% xylene [4]

REACH No.: 01-2119488216-32-XXXX, CAS: 1330-20-7, EC: 215-535-7
Flam. Liq. 3 H226 Flammable liquid and vapour.
Acute Tox. 4 H312 Harmful in contact with skin.
Acute Tox. 4 H332 Harmful if inhaled.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H335 May cause respiratory irritation.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

>= 2% - < 3% 2,6-dimethylheptan-4-one; di-isobutyl ketone
REACH No.: 01-2119474441-41-XXXX, Index number: 606-005-00-X, CAS: 108-83-8, EC: 203-620-1
Flam. Liq. 3 H226 Flammable liquid and vapour.
STOT SE 3 H335 May cause respiratory irritation.

>= 1% - < 2% Hydroxyphenyl-benzotriazole derivatives - EC number 400-830-7
REACH No.: 01-0000015075-76-xxxx, Index number: 607-176-00-3, CAS: 104810-48-2, EC: 400-830-7
Skin Sens. 1,1A,1B H317 May cause an allergic skin reaction.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

>= 1% - < 2% aluminium hydroxide
CAS: 21645-51-2, EC: 244-492-7
Substance with a Union workplace exposure limit.

>= 1% - < 2% hydrocarbons, C9, aromatics
EC: 918-668-5
Flam. Liq. 3 H226 Flammable liquid and vapour.
STOT SE 3 H335 May cause respiratory irritation.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
STOT SE 3 H336 May cause drowsiness or dizziness.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.
DECLP (CLP)*

>= 0.5% - < 1% ethylbenzene
Index number: 601-023-00-4, CAS: 100-41-4, EC: 202-849-4
Flam. Liq. 2 H225 Highly flammable liquid and vapour.
STOT RE 2 H373 H373.5
Acute Tox. 4 H332 Harmful if inhaled.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

>= 0.5% - < 1% Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
REACH No.: 01-2119491304-40-XXXX, CAS: 111-20-6, EC: 915-687-0
Skin Sens. 1,1A,1B H317 May cause an allergic skin reaction.
Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

>= 0.1% - < 0.25% fatty acids, C14-C18 and C16-C18-unsatured, maleated
REACH No.: 01-2119976378-19-0000
Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

*DECLP (CLP): Substance classified in accordance with Note P, Annex VI of EC Regulation (EC) 1272/2008. The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 (Table 3.1) or the S-phrases (2-)23-24-62 (Table 3.2) shall apply. This note applies only to certain complex oil-derived substances in Part 3.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

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

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.

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

May cause an allergic skin reaction.

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:

In case of fire use CO2 or chemical powder. Never use water.

Extinguishing media which must not be used for safety reasons:

Do not use water jets

None in particular.

5.2. Special hazards arising from the substance or mixture

Avoid inhaling the fumes.

5.3. Advice for firefighters

Use suitable breathing apparatus .

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.

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 all sources of ignition.

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.
Adequately ventilated premises.
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

Always keep the containers tightly closed.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.
Adequately ventilated premises.

7.3. Specific end use(s)

See section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

titanium dioxide - CAS: 13463-67-7
- EU - TWA(8h): 10 mg/m3
- AGS - TWA(8h): 5 mg/m3
- ACGIH - TWA(8h): 10 mg/m3 - Notes: A4 - LRT irr
- MAK - STEL: 3 mg/m3
- HRKGVI - Notes: 4 mg/m3 (R respirabilna prašina)
- VLE1 - Notes: 10 mg/m3 (U ukupna prašina)

2-methoxy-1-methylethyl acetate - CAS: 108-65-6
- EU - TWA(8h): 275 mg/m3, 50 ppm - STEL: 550 mg/m3, 100 ppm - Notes: Skin
- HR - TWA(8h): 275 mg/m3, 50 ppm
- HRKGVI - STEL: 550 mg/m3, 100 ppm

2-methoxy-1-methylethyl acetate - CAS: 108-65-6
- EU - TWA(8h): 275 mg/m3, 50 ppm - STEL: 550 mg/m3, 100 ppm - Notes: Skin
- HR - TWA(8h): 275 mg/m3, 50 ppm
- HRKGVI - STEL: 550 mg/m3, 100 ppm

xylene [4] - CAS: 1330-20-7

EU - TWA(8h): 221 mg/m3, 50 ppm - STEL: 442 mg/m3, 100 ppm - Notes: Skin
AGS - TWA(8h): 221 mg/m3 - STEL((15 min)): 442 mg/m3 - Notes: (Anm. H: Ämnet kan lätt upptas genom huden)
ACGIH - TWA(8h): 100 ppm - STEL: 150 ppm - Notes: A4, BEI - URT and eye irr, CNS impair
AGS - TWA(8h): 221 mg/m3 - STEL((15 min)): 442 mg/m3 - Notes: (Anm. H: Ämnet kan lätt upptas genom huden)
VLE1 - TWA(8h): 211 mg/m3, 50 ppm
VLE - STEL: 442 mg/m3, 100 ppm - Notes: Skin

2,6-dimethylheptan-4-one; di-isobutyl ketone - CAS: 108-83-8
ACGIH - TWA(8h): 25 ppm - Notes: URT and eye irr

aluminium hydroxide - CAS: 21645-51-2
EU - TWA(8h): 1 mg/m3
MAK - TWA: 24 mg/m3 - STEL: 3 mg/m3

hydrocarbons, C9, aromatics
EU - STEL: 100 mg/m3, 20 ppm
AGS - TWA(8h): 250-350 mg/m3

ethylbenzene - CAS: 100-41-4
EU - TWA(8h): 442 mg/m3, 100 ppm - STEL: 884 mg/m3, 200 ppm - Notes: Skin
AGS - TWA(8h): 200 mg/m3 - STEL((15 min)): 450 mg/m3
ACGIH - TWA(8h): 20 ppm - Notes: A3, BEI - URT irr, kidney dam (nephropathy), cochlear impair
VLE1 - TWA(8h): 442 mg/m3, 100 ppm
VLE - STEL: 884 mg/m3, 200 ppm

DNEL Exposure Limit Values

titanium dioxide - CAS: 13463-67-7
Worker Industry: 10 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Consumer: 700 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

2-methoxy-1-methylethyl acetate - CAS: 108-65-6
Worker Industry: 153.5 mg/kg - Worker Professional: 153.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 275 mg/kg - Worker Professional: 275 mg/kg - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 54.8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 33 mg/kg - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 1.67 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

2-methoxy-1-methylethyl acetate - CAS: 108-65-6
Worker Industry: 153.5 mg/kg - Worker Professional: 153.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 275 mg/kg - Worker Professional: 275 mg/kg - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 54.8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 33 mg/kg - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 1.67 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

xylene [4] - CAS: 1330-20-7

Worker Industry: 289 mg/m3 - Consumer: 174 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Industry: 289 mg/m3 - Consumer: 174 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects
Worker Industry: 180 mg/kg - Consumer: 108 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 77 mg/m3 - Consumer: 14.8 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 1.6 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

2,6-dimethylheptan-4-one; di-isobutyl ketone - CAS: 108-83-8
Worker Industry: 290 mg/m3 - Consumer: 145 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Industry: 80 mg/kg - Consumer: 28.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 479 mg/m3 - Consumer: 171 mg/kg - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 7.14 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

aluminium hydroxide - CAS: 21645-51-2
Worker Industry: 3.59 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

hydrocarbons, C9, aromatics
Worker Industry: 25 mg/kg - Consumer: 11 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 150 mg/m3 - Consumer: 32 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 11 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

titanium dioxide - CAS: 13463-67-7
Target: Marine water - Value: 1 mg/L
Target: Fresh Water - Value: 0.127 mg/L
Target: Microorganisms in sewage treatments - Value: 100 mg/L
Target: Marine water sediments - Value: 100 mg/kg
Target: Freshwater sediments - Value: 1000 mg/kg

2-methoxy-1-methylethyl acetate - CAS: 108-65-6
Target: Fresh Water - Value: 0.635 mg/L
Target: Marine water - Value: 0.0635 mg/L
Target: Microorganisms in sewage treatments - Value: 100 mg/L
Target: Freshwater sediments - Value: 3.29 mg/kg
Target: Marine water sediments - Value: 0.329 mg/kg

2-methoxy-1-methylethyl acetate - CAS: 108-65-6
Target: Fresh Water - Value: 0.635 mg/L
Target: Marine water - Value: 0.0635 mg/L
Target: Microorganisms in sewage treatments - Value: 100 mg/L
Target: Freshwater sediments - Value: 3.29 mg/kg
Target: Marine water sediments - Value: 0.329 mg/kg

xylene [4] - CAS: 1330-20-7
Target: Fresh Water - Value: 0.327 mg/L
Target: Marine water - Value: 0.327 mg/L
Target: Freshwater sediments - Value: 12.46 mg/kg
Target: Marine water sediments - Value: 12.46 mg/kg

Target: Microorganisms in sewage treatments - Value: 6.58 mg/L
2,6-dimethylheptan-4-one; di-isobutyl ketone - CAS: 108-83-8
Target: Fresh Water - Value: 0.03 mg/L
Target: Marine water - Value: 0.003 mg/L
Target: Marine water sediments - Value: 0.046 mg/kg
Target: Freshwater sediments - Value: 0.46 mg/kg
Target: Microorganisms in sewage treatments - Value: 2.55 mg/L
aluminium hydroxide - CAS: 21645-51-2
Target: Fresh Water - Value: 0.0749 mg/L
Biological Exposure Index
xylene [4] - CAS: 1330-20-7
Value: 1.50 mg/L - medium: Blood - Sampling Period: End of turn
Value: 1.50 gg creatinina - medium: Blood - Sampling Period: End of turn
ethylbenzene - CAS: 100-41-4
Value: 1.50 mg/L - medium: Blood - Sampling Period: DU
Value: 2 ppm - medium: Air at the end of exhalation - Sampling Period: A
Value: 1.50 gg creatinina - medium: Urine - Biological Indicator: 78 - Sampling Period: End of turn; End of working week

8.2. Exposure controls

Eye protection:
Use goggles/facemask certified UNI EN 166.
Use close fitting safety goggles, don't use eye lens.

Protection for skin:
Suitable protective clothing is required for complete skin protection: for example coveralls with long sleeves and trousers, rubber boots and apron, etc., according to UNI EN 14325.

Protection for hands:
Use protective gloves: waterproof rubber gloves certified UNI EN 374. Nitrile gloves provide good protection. Use care in selecting a penetration time of the gloves longer than the foreseen usage time.

Respiratory protection:
Use adequate protective respiratory equipment: a carbon filter mask with filters certified UNI EN 149 or dust masks certified UNI EN 140. Filters of types A and P types may be considered.

Thermal Hazards:
None

Environmental exposure controls:
See sections 6 and 13

Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance :	liquid
Odour:	N.A.
Colour:	white
pH:	N.A.
Melting point / freezing point:	N.A.
Boiling point (°C):	bp>35 °C
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.

Vapour density: N.A.
Flash point: 38 °C
Evaporation rate: N.A.
Vapour pressure: N.A.
Specific gravity (Kg/L) 20°C : 1.3770
Methodology: SPECIFIC WEIGHT BY MEANS OF PICNOMETER (gr / cm3).
Solubility in water: N.A.
Lipid solubility: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Kinematic viscosity at 40°C (mm2/s): kv > 20,5
Viscosity (23°C+-0.5°C): min 120 - max 150
Methodology: UNI EN ISO 2431 (ex DIN 53211 s)
Flow cup: DIN 4
Spindle: 0
Speed (rpm): 0

9.2. Other information

No further 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

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

FUTURA

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

Not classified

Based on available data, the classification criteria are not met

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:

titanium dioxide - CAS: 13463-67-7
a) acute toxicity:
Test: LD50 - Route: oral - Species: rat > 10.000 mg/kg

2-methoxy-1-methylethyl acetate - CAS: 108-65-6
a) acute toxicity:
Test: LD50 - Route: oral - Species: rat > 5000 mg/kg
Test: LD50 - Route: dermal - Species: rabbit > 5000 mg/kg
Test: LD50 - Route: inhalation - Species: rat > 2000 Ppm - Duration: 3 h

2-methoxy-1-methylethyl acetate - CAS: 108-65-6
a) acute toxicity:
Test: LD50 - Route: oral - Species: rat > 5000 mg/kg
Test: LC50 - Route: inhalation - Species: rat > 10.6 mg/kg
Test: LD50 - Route: dermal - Species: rat > 2000 mg/kg
b) skin corrosion/irritation:
Test: Skin Corrosive - Species: rabbit Negative

xylene [4] - CAS: 1330-20-7
a) acute toxicity:
Test: LD50 - Route: oral - Species: rat > 3523 mg/kg
Test: LD50 - Route: dermal - Species: rabbit > 2000 mg/kg
Test: LC50 - Route: inhalation - Species: rat > 27.571 mg/l - Duration: 4h
b) skin corrosion/irritation:
Test: Skin Irritant Positive
c) serious eye damage/irritation:
Test: Eye Irritant Positive

aluminium hydroxide - CAS: 21645-51-2
a) acute toxicity:
Test: LD50 - Route: oral - Species: rat > 5000 mg/kg

hydrocarbons, C9, aromatics
a) acute toxicity:
Test: LD50 - Route: oral - Species: rat > 3492 mg/kg
Test: LD50 - Route: dermal - Species: rat > 3160 mg/kg

Test: LC50 - Route: inhalation - Species: rat > 6193 mg/m3 - Duration: 4h
ethylbenzene - CAS: 100-41-4
a) acute toxicity:
Test: LC50 - Route: inhalation - Species: rat = 17.2 mg/l - Duration: 4h

SECTION 12: Ecological information

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
FUTURA
The product is classified: Aquatic Chronic 3 - H412
titanium dioxide - CAS: 13463-67-7
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96 - Notes: OECD 203
Endpoint: LC50 - Species: Daphnia > 100 mg/l - Duration h: 48 - Notes: OECD 202
2-methoxy-1-methylethyl acetate - CAS: 108-65-6
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Algae > 1000 mg/l - Duration h: 96
Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia > 500 mg/l - Duration h: 48
2-methoxy-1-methylethyl acetate - CAS: 108-65-6
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Algae > 1000 mg/l - Duration h: 72
Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia > 400 mg/l - Duration h: 48
xylene [4] - CAS: 1330-20-7
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 2.6 ml/l - Duration h: 96
Endpoint: EC50 - Species: Algae = 2.2 mg/l - Duration h: 72
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Fish > 1.3 mg/l - Notes: 56 d
Endpoint: NOEC - Species: Daphnia = 0.74 mg/l - Notes: 7 d
hydrocarbons, C9, aromatics
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 9.2 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 3.2 mg/l - Duration h: 48
Endpoint: NOEC - Species: Algae = 1 mg/l - Duration h: 72
Endpoint: EC50 - Species: Algae = 2.9 mg/l - Duration h: 72

12.2. Persistence and degradability
There is no data available on the preparation itself.
2-methoxy-1-methylethyl acetate - CAS: 108-65-6
Biodegradability: Readily biodegradable - Test: Oxygen consumption - %: 83 - Notes: 28 d
xylene [4] - CAS: 1330-20-7
Biodegradability: Readily biodegradable - Notes: solubilità in acqua=146 mg/l
hydrocarbons, C9, aromatics
Biodegradability: Readily biodegradable - %: 78 - Notes: 28 d

12.3. Bioaccumulative potential
There is no data available on the preparation itself.
2-methoxy-1-methylethyl acetate - CAS: 108-65-6
Bioaccumulation: Not bioaccumulative - Notes: log Pow=1,2

xylene [4] - CAS: 1330-20-7
Test: Kow - Partition coefficient 3.2 - Notes: mg/l
Test: BCF - Bioconcentrantion factor 25.9 - Notes: mg/l

12.4. Mobility in soil
There is no data available on the preparation itself.
2-methoxy-1-methylethyl acetate - CAS: 108-65-6
Mobility in soil: Mobile
xylene [4] - CAS: 1330-20-7
Test: Koc 2.73 - Notes: mg/l

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. Directives 91/156/CEE, 91/689/CEE, 94/62/CE.
EWC CODE 080111
Do not empty into drains, ground or waterways. Dispose of product residues and related containers at a collection point for hazardous or special waste or, where appropriate, through an authorized waste disposal company.

SECTION 14: Transport information

14.1. UN number
UN 1263

14.2 Proper shipping name:Paint

14.3 Transport hazard class(es) and Packing Group:
3 PG III

14.4. Environmental hazards
Marine Pollutant: -

14.5. Special precautions for user
None

Other informations
Land transport ADR/RID
Exemptions: ADR:2.2.3.1.5 - IMDG:2.3.2.5
ADR Classification code: F1
Maximum quantity for Limited Quiantities: 5L/Kg
Tunnel code :D/E
Transport category: 3

Marittime transport (IMDG)
Exemptions: ADR:2.2.3.1.5 - IMDG:2.3.2.5
Maximum quantity for Limited Quiantities: 5L/Kg
EmS number: F-E/S-E
Stowage provisions: A

Air transport(IATA/ICAO)
Exemptions: ADR:2.2.3.1.5 - IMDG:2.3.2.5
Maximum quantity for Limited Quiantities: 5L/Kg
Pkg. inst. passenger and cargo aircraft: 309
Pkg. inst. cargo aircraft only: 310

Erg-code: 3L

SECTION 15: Regulatory information

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

Dir. 89/391/CEE and subsequent amendments (Risks related to chemical agents at work and Occupational exposure limit values). Directive 1999/13/EC and subsequent amendments (limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations). Regulation (CE) n. 1907/2006 , Regulation (CE) 830/2015 and subsequent amendments (concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals - REACH). Regulation (CE) n.1272/2008 and subsequent amendments (on classification, labeling and packaging of substances and mixtures - CLP).

International Maritime Dangerous Goods Code, IATA Dangerous Goods Regulation, International Carriage of Dangerous Goods by Road (ADR).

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

Restriction 3 is not applicable because the mixture does not fall within the restrictions mentioned in Annex XVII of EC Regulation No. 1907/2006.

Restriction 40 is not applicable because the mixture does not fall within the restrictions mentioned in Annex XVII of EC Regulation No. 1907/2006.

Where applicable, refer to the following regulatory provisions :

Directive 2004/42/CE on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products.
Regulation UE No 649/2012 concerning the export and import of dangerous chemicals.
Regulation UE n. 528/2012 concerning the making available on the market and use of biocidal products.

Directive 2012/18/EU (Seveso III)

Regulation (EC) No. 648/2004 (detergents).

Directive 2004/42/CE on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products.

Regulation (EC) No 689/2006 concerning the export and import of dangerous chemicals.

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: P5c

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

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/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), 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. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
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

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**
Flam. Liq. 3, H226	On basis of test data
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.
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.