

Safety Data Sheet

FRS40 VARNISH LIGHT PEARL

AkzoNobel

Safety Data Sheet dated 18/3/2020, version 3

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

1.1. Product identifier

Trade name: FRS40 VARNISH LIGHT PEARL
Trade code: 21040405B

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

Recommended use:
Solvent based 2K polyurethane paint

1.3. Details of the supplier of the safety data sheet

Company:
MAPAERO SAS
10, Avenue de la Rijole
09100 PAMIERS
FRANCE
Tel : +33 (0)5 34 01 34 01 / Fax : +33 (0)5 61 60 23 30

Competent person responsible for the safety data sheet:

PSRA_PAMIERS@akzonobel.com

1.4. Emergency telephone number

Tel: 0044 151 951 3317

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- ⚠ Warning, Flam. Liq. 3, Flammable liquid and vapour.
- ⚠ Warning, Skin Irrit. 2, Causes skin irritation.
- ⚠ Warning, Eye Irrit. 2, Causes serious eye irritation.
- ⚠ Warning, STOT SE 3, May cause drowsiness or dizziness.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.

Precautionary statements:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P370+P378 In case of fire, use a foam fire extinguisher to extinguish.
- P403+P235 Store in a well-ventilated place. Keep cool.

Special Provisions:

- EUH208 Contains methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate. May produce an allergic reaction.
- EUH208 Contains 2-hydroxyethyl methacrylate. May produce an allergic reaction.

Contains

n-butyl acetate

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

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None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 25% - < 50%	n-butyl acetate	Index number: 607-025-00-1 CAS: 123-86-4 EC: 204-658-1 REACH No.: 01-2119485493-29	<ul style="list-style-type: none"> ⚠ 2.6/3 Flam. Liq. 3 H226 ⚠ 3.8/3 STOT SE 3 H336 EUH066
>= 10% - < 20%	2-methoxy-1-methylethyl acetate	Index number: 607-195-00-7 CAS: 108-65-6 EC: 203-603-9 REACH No.: 01-2119475791-29	<ul style="list-style-type: none"> ⚠ 2.6/3 Flam. Liq. 3 H226
>= 10% - < 20%	xylene	Index number: 601-022-00-9 CAS: 1330-20-7 EC: 215-535-7 REACH No.: 01-2119488216-32	<ul style="list-style-type: none"> ⚠ 2.6/3 Flam. Liq. 3 H226 ⚠ 3.10/1 Asp. Tox. 1 H304 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.1/4/Dermal Acute Tox. 4 H312 ⚠ 3.1/4/Inhal Acute Tox. 4 H332
>= 0.5% - < 2.5%	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate	Index number: 607-035-00-6 CAS: 80-62-6 EC: 201-297-1 REACH No.: 01-2119452498-28	<ul style="list-style-type: none"> ⚠ 2.6/2 Flam. Liq. 2 H225 ⚠ 3.8/3 STOT SE 3 H335 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1 Skin Sens. 1 H317
>= 0.1% - < 0.5%	rutile (TiO ₂)	CAS: 1317-80-2 EC: 215-282-2 REACH No.: 01-2119954396-27	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
>= 0.1% - < 0.5%	2-hydroxyethyl methacrylate	Index number: 607-124-00-X CAS: 868-77-9 EC: 212-782-2 REACH No.: 01-2119490169-29	<ul style="list-style-type: none"> ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 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.
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

Suitable extinguishing media:
In case of fire, use a foam fire extinguisher to extinguish.
Water with AFFF (Aqueous Film Forming Foam) additive

Foam

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction :

Water

Water jet

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 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.

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

Stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging.

Always keep in a well ventilated place.

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.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

n-butyl acetate - CAS: 123-86-4

- OEL Type: VLE - TWA(8h): 710 mg/m³, 150 ppm - STEL: 940 mg/m³, 200 ppm
- OEL Type: MAK - TWA: 480 mg/m³, 100 ppm
- OEL Type: ACGIH - TWA(8h): 50 ppm - STEL: 150 ppm
- OEL Type: AGS - TWA(8h): 300 mg/m³, 62 ppm - STEL: 600 mg/m³, 124 ppm
- OEL Type: TWA - TWA(8h): 724 mg/m³, 150 ppm - STEL: 966 mg/m³, 200 ppm
- OEL Type: MAK-TMW - TWA(8h): 480 mg/m³, 100 ppm
- OEL Type: MAK-KZW - STEL(15min): 480 mg/m³, 100 ppm

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

- OEL Type: VME - TWA(8h): 275 mg/m³, 50 ppm
- OEL Type: VLE - TWA(8h): 550 mg/m³, 110 ppm - STEL: 550 mg/m³, 100 ppm
- OEL Type: AGW - TWA(8h): 270 mg/m³, 50 ppm - STEL: 270 mg/m³, 50 ppm
- OEL Type: AGS - TWA(8h): 270 mg/m³, 50 ppm - STEL: 270 mg/m³, 50 ppm
- OEL Type: WEL - TWA(8h): 274 mg/m³, 50 ppm - STEL: 548 mg/m³, 100 ppm
- OEL Type: TWA - TWA(8h): 275 mg/m³, 50 ppm
- OEL Type: EU - TWA(8h): 275 mg/m³, 50 ppm - STEL: 550 mg/m³, 100 ppm
- OEL Type: MAK-TMW - TWA(8h): 275 mg/m³, 50 ppm
- OEL Type: MAK-KZW - STEL(15min): 550 mg/m³, 100 ppm

xylene - CAS: 1330-20-7

- OEL Type: VLE - TWA(8h): 442 mg/m³, 100 ppm
- OEL Type: VME - TWA(8h): 221 mg/m³, 50 ppm - STEL: 442 mg/m³, 100 ppm
- OEL Type: TWA - TWA(8h): 221 mg/m³, 50 ppm
- OEL Type: EU - TWA(8h): 221 mg/m³, 50 ppm - STEL: 442 mg/m³, 100 ppm
- OEL Type: ACGIH - TWA(8h): 100 ppm - STEL: 150 ppm
- OEL Type: AGS - TWA(8h): 440 mg/m³, 100 ppm - STEL: 880 mg/m³, 880 ppm
- OEL Type: MAK-TMW - TWA(8h): 221 mg/m³, 50 ppm
- OEL Type: MAK-KZW - STEL(15min): 442 mg/m³, 100 ppm

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate - CAS: 80-62-6

- OEL Type: EU - TWA(8h): 50 ppm - STEL: 100 ppm
- OEL Type: ACGIH - TWA(8h): 50 ppm - STEL: 100 ppm
- OEL Type: MAK-TMW - TWA(8h): 210 mg/m³, 50 ppm
- OEL Type: MAK-KZW - STEL(15min): 420 mg/m³, 100 ppm
- OEL Type: WEL - TWA(8h): 208 mg/m³, 50 ppm - STEL(15min): 416 mg/m³, 100 ppm
- OEL Type: DFG - TWA: 210 mg/m³, 50 ppm
- OEL Type: VME - TWA(8h): 205 mg/m³, 50 ppm - STEL(15min): 410 mg/m³, 100 ppm

DNEL Exposure Limit Values

n-butyl acetate - CAS: 123-86-4

- Worker Professional: 960 mg/m³ - Consumer: 859.7 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
- Worker Professional: 960 mg/m³ - Consumer: 859.7 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects
- Worker Professional: 480 mg/m³ - Consumer: 102.34 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
- Worker Professional: 480 mg/m³ - Consumer: 102.34 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

- Worker Professional: 275 mg/m³ - Consumer: 33 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
- Worker Professional: 153.5 mg/kg - Consumer: 54.8 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
- Consumer: 1.67 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

xylene - CAS: 1330-20-7

- Worker Professional: 422 mg/m³ - Consumer: 260 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
- Worker Professional: 422 mg/m³ - Consumer: 260 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects
- Worker Professional: 3182 mg/kg - Consumer: 1872 mg/kg - Exposure: Human Dermal -

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Frequency: Long Term, systemic effects
Worker Professional: 221 mg/m³ - Consumer: 65.3 mg/m³ - Exposure: Human Inhalation
- Frequency: Long Term, systemic effects
Worker Professional: 289 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term,
local effects
Worker Professional: 77 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term,
systemic effects
Consumer: 12.5 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic
effects
Worker Professional: 221 mg/m³ - Consumer: 65.3 mg/m³ - Exposure: Human Inhalation
- Frequency: Long Term, local effects
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate - CAS: 80-62-6
Worker Professional: 1.5 mg/cm² - Exposure: Human Dermal - Frequency: Long Term,
local effects
Worker Professional: 13.67 mg/kg bw/day - Exposure: Human Dermal - Frequency: Long
Term, systemic effects
Worker Professional: 210 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term,
local effects

PNEC Exposure Limit Values

n-butyl acetate - CAS: 123-86-4

Target: Fresh Water - Value: 0.18 mg/l

Target: Marine water - Value: 0.018 mg/l

Target: Freshwater sediments - Value: 0.981 mg/kg

Target: Marine water sediments - Value: 0.0981 mg/kg

Target: Soil (agricultural) - Value: 0.0903 mg/kg

Target: Microorganisms in sewage treatments - Value: 35.6 mg/l

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: Freshwater sediments - Value: 3.29 mg/kg

Target: Marine water sediments - Value: 0.329 mg/kg

Target: Microorganisms in sewage treatments - Value: 100 mg/l

Target: Soil (agricultural) - Value: 0.29 mg/kg

xylene - CAS: 1330-20-7

Target: Fresh Water - Value: 0.327 mg/l

Target: Marine water - Value: 0.327 mg/l

Target: Microorganisms in sewage treatments - Value: 6.58 mg/l

Target: Freshwater sediments - Value: 12.46 mg/kg

Target: Marine water sediments - Value: 12.46 mg/kg

Target: Soil (agricultural) - Value: 2.31 mg/kg

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate - CAS: 80-62-6

Target: Fresh Water - Value: 0.94 mg/l

Target: Marine water - Value: 0.094 mg/l

Target: Freshwater sediments - Value: 5.74 mg/kg dwt

Target: Soil (agricultural) - Value: 1.47 mg/kg dwt

Target: Microorganisms in sewage treatments - Value: 10 mg/l

8.2. Exposure controls

Eye protection:

Before handling, wear safety goggles with protective sides accordance with standard EN166.

Protection for skin:

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Wear protective clothing against solid chemicals and particles suspended in the air (type 5) in accordance with standard EN13982-1 to prevent skin contact.

Protection for hands:

Use suitable protective gloves that are resistant to chemical agents in accordance with standard

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EN374.

Respiratory protection:

Full-/Half-/quarter-face masks (DIN EN 136/140).

Particle filter according to standard EN143 : P3

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 : A2

Thermal Hazards:

None

Environmental exposure controls:

It is recommended using all available means to prevent and regulate exposure in compliance with legal requirements.

Use all the appropriate means to keep suspended dust levels under exposure limits.

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour:	Liquid
Odour:	Solvent odor
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	-25 °C
Initial boiling point and boiling range:	126 °C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	23 ≤ PE ≤ 55 °C
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	<1
Solubility in water:	N.A.
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	333 °C
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.

9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties:	N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

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10.3. Possibility of hazardous reactions

Exposed to high temperatures, the mixture can release hazardous decomposition products.

10.4. Conditions to avoid

Flames and hot surfaces
The accumulation of electrostatic discharges
The humidity
The heating
The heat

10.5. Incompatible materials

Acids
Oxidizing agents
Bases
Water

10.6. Hazardous decomposition products

Carbon oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

n-butyl acetate - CAS: 123-86-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 10760 mg/kg

Test: LC50 - Route: Inhalation Mist - Species: Rat = 23.4 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit > 14112 mg/kg

Test: LC50 - Route: Inhalation Vapour - Species: Rat > 21 mg/l - Duration: 4h

h) STOT-single exposure:

Test: Nervous system Positive

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 8532 mg/kg

Test: LC0 - Route: Inhalation Vapour - Species: Rat > 4345 ppm - Duration: 6H

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

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

Test: LC50 - Route: Inhalation Mist - Species: Rat > 23.8 mg/l - Duration: 6H

Test: LC50 - Route: Inhalation Dust - Species: Rat > 23.8 mg/l - Duration: 6H

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Negative

c) serious eye damage/irritation:

Test: Eye Irritant - Route: Skin - Species: Rabbit Negative

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin Positive

e) germ cell mutagenicity:

Test: Mutagenesis - Species: Salmonella Typhimurium Negative

xylene - CAS: 1330-20-7

a) acute toxicity:

Test: LC50 - Route: Inhalation Gas - Species: Rat = 4500 ppm

Test: LD50 - Route: Skin = 1100 mg/kg

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

Test: LD50 - Route: Oral - Species: Rat = 5000 mg/kg

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- Test: LC50 - Route: Inhalation - Species: Rat = 5000 ppm - Duration: 4h
- d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin - Species: Mouse Negative - Source: OCDE 429
- e) germ cell mutagenicity:
Test: Mutagenesis - Route: Inhalation - Species: Rabbit Negative 4350 mg/kg
- f) carcinogenicity:
Test: Carcinogenicity - Route: Oral - Species: Rat Negative 500 mg/kg - Source: DIRECTIVE 67/548/CEE
- g) reproductive toxicity:
Test: NOAEL - Route: Inhalation - Species: Rat > 500 ppm
- i) STOT-repeated exposure:
Test: NOAEL - Route: Oral - Species: Rat = 150 mg/kg - Duration: 90days - Source: OCDE 408
- 2-hydroxyethyl methacrylate - CAS: 868-77-9
- a) acute toxicity:
Test: LD50 - Route: Skin - Species: Rabbit > 3000 mg/kg

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;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

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

n-butyl acetate - CAS: 123-86-4

a) Aquatic acute toxicity:

- Endpoint: LC50 Fish = 18 mg/l - Duration h: 96
- Endpoint: EC50 Daphnia = 44 mg/l - Duration h: 48
- Endpoint: EC50 Algae = 647.7 mg/l - Duration h: 72
- Endpoint: NOEC Algae = 200 mg/l
- Endpoint: CI50 Bacteria = 356 mg/l - Duration h: 40
- Endpoint: CI50 Fish = 32 mg/l - Duration h: 48

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

a) Aquatic acute toxicity:

- Endpoint: LC50 Fish = 134 mg/l - Duration h: 96
- Endpoint: EC50 Daphnia > 500 mg/l - Duration h: 48
- Endpoint: EC50 Algae > 1000 mg/l - Duration h: 72
- Endpoint: EC10 Bacteria > 1000 mg/l - Duration h: 0.5
- Endpoint: LC50 Fish > 100 mg/l - Duration h: 96

b) Aquatic chronic toxicity:

- Endpoint: NOEC Fish = 47.5 mg/l - Duration h: 336
- Endpoint: NOEC Daphnia > 100 mg/l - Duration h: 504

c) Bacteria toxicity:

- Bacteria > 1000 mg/l - Duration h: 0.5

xylene - CAS: 1330-20-7

a) Aquatic acute toxicity:

- Endpoint: EC50 Algae = 4.36 mg/l - Duration h: 72 - Notes: OCDE 201
- Endpoint: CI50 Daphnia = 1 mg/l - Duration h: 24 - Notes: OCDE 202
- Endpoint: LC50 Fish = 2.6 mg/l - Duration h: 96 - Notes: OCDE 203

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Endpoint: NOEC Algae = 0.44 mg/l - Duration h: 73
Endpoint: EC50 Daphnia > 1 mg/l - Duration h: 48
Endpoint: EC50 Daphnia = 10 mg/l - Duration h: 48
Endpoint: CI50 Algae = 2.2 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC Daphnia = 0.96 mg/l - Duration h: 168
Endpoint: NOEC Fish > 1.3 mg/l - Duration h: 1344

c) Bacteria toxicity:

Endpoint: EC50 = 96 mg/l - Duration h: 24

12.2. Persistence and degradability

xylene - CAS: 1330-20-7

Biodegradability: Readily biodegradable - Duration h: 28days - %: 87.8 - Notes: OCDE 301F (41 mg/L)

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

xylene - CAS: 1330-20-7

Test: Koc 39-365 - Notes: OCDE 121

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. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. The codes for waste (Decision 2001/573/CE, Directive 2006/12/CEE, Directive 94/31/CEE on hazardous waste) :

15 01 10* packaging containing residues of or contaminated by hazardous substances

08 01 11* waste paint and varnish containing organic solvents or other hazardous substances

Additional disposal information:

Do not discharge into drains, water, nature.

SECTION 14: Transport information

14.1. UN number

ADR-UN Number:	1263
IATA-UN Number:	1263
IMDG-UN Number:	1263

14.2. UN proper shipping name

ADR-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED

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MATERIAL (including paint thinning and reducing compound)
IATA-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)
IMDG-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)

14.3. Transport hazard class(es)



ADR-Class: 3
ADR - Hazard identification number: 30
IATA-Class: 3
IATA-Label: 3
IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III
IATA-Packing group: III
IMDG-Packing group: III

14.5. Environmental hazards

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

14.6. Special precautions for user

ADR-Subsidiary hazards: -
ADR-S.P.: 163 367 650
ADR-Transport category (Tunnel restriction code): 3 (D/E)
IATA-Passenger Aircraft: 355
IATA-Subsidiary hazards: -
IATA-Cargo Aircraft: 366
IATA-S.P.: A3 A72 A192
IATA-ERG: 3L
IMDG-EmS: F-E , S-E
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

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) 2015/830

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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:

Restriction 30

Volatile Organic compounds - VOCs = 650.00 g/l

Volatile CMR substances = 0.00 %

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

Organic Carbon - C = 0.00

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: P5c

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.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H225 Highly flammable liquid and vapour.

H335 May cause respiratory irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

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

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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
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, 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 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 13: Disposal considerations
- 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
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H336	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.

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AkzoNobel

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.