

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

# SAFETY DATA SHEET

FRS-40 SEMI-GLOSS BASE GREY ARMREST B560

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

Product name SDS code

: FRS-40 SEMI-GLOSS BASE GREY ARMREST B560 : 4092B560B

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

Identified uses	
Paint. Professional use Industrial use	
Uses advised against	
All other uses	
Product use	: Solvent borne coating for interior use.

## 1.3 Details of the supplier of the safety data sheet

MAPAERO SAS 10, Avenue de la Rijole CS30098 09103 PAMIERS Cedex France e-mail address of person : PSRA PAMIERS@akzonobel.com

responsible for this SDS

## 1.4 Emergency telephone number

National advisory body/Poison Center		
Telephone number	: +358 (0)9 471977	
<u>Supplier</u>		
Telephone number	: +33 (0)5 34 01 34 01	
Hours of operation	+33 (0)5 61 60 23 30 :	

# **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

**Product definition** : Mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

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## **SECTION 2: Hazards identification**

## 2.2 Label elements

Hazard pictograms

**Hazard statements** 

Signal word

Storage Disposal



# Precautionary statements Prevention : Obtain special instructions before use. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapor.

- Response: IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a<br/>POISON CENTER or doctor if you feel unwell. IF IN EYES: Rinse cautiously with<br/>water for several minutes. Remove contact lenses, if present and easy to do.<br/>Continue rinsing. If eye irritation persists: Get medical advice or attention.
  - : Store in a well-ventilated place. Keep container tightly closed. Keep cool.
  - : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazardous ingredients : n-butyl acetate 4-methylpentan-2-one
- Supplemental label<br/>elements: Contains methyl methacrylate and 4-morpholinecarbaldehyde. May produce an<br/>allergic reaction. Repeated exposure may cause skin dryness or cracking.
- Annex XVII Restrictions : Not applicable. on the manufacture.

placing on the market and use of certain dangerous substances, mixtures and articles

## Special packaging requirements

Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	:	Not applicable.

## 2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	:	None known.



# **SECTION 3: Composition/information on ingredients**

3.2 Mixtures : M Product/ingredient name	lixture Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥25 - ≤50	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
Reaction mass of ethylbenzene and xylene	REACH #: 01-2119488216-32 EC: 905-588-0	<10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
4-methylpentan-2-one	EC: 203-550-1 CAS: 108-10-1 Index: 606-004-00-4	≤3	Flam. Liq. 2, H225 Acute Tox. 4, H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 EUH066	[1] [2]
aromatic hydrocarbons, C9	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 128601-23-0	<1	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclic, aromatics (2-25%)	REACH #: 01-2119458049-33 EC: 919-446-0	<1	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (inhalation) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
methyl methacrylate	REACH #: 01-2119452498-28 EC: 201-297-1 CAS: 80-62-6 Index: 607-035-00-6	<1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335	[1] [2]
4-morpholinecarbaldehyde	EC: 224-518-3 CAS: 4394-85-8	≤0.3	Skin Sens. 1, H317	[1]
cyclohexanone	REACH #: 01-2119453616-35 EC: 203-631-1 CAS: 108-94-1 Index: 606-010-00-7	≤0.1	Flam. Liq. 3, H226 Acute Tox. 4, H332	[1] [2]
			See Section 16 for the full text of the H statements declared above.	

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# **SECTION 3: Composition/information on ingredients**

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

## Туре

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

## **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

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# **SECTION 4: First aid measures**

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains methyl methacrylate, 4-morpholinecarbaldehyde. May produce an allergic reaction.

## Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation dryness cracking
Ingestion	No specific data.

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

Notes to physician	<ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</li> </ul>
Specific treatments	: No specific treatment.

# **SECTION 5: Firefighting measures**

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5.1 Extinguishing media		
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.	
Unsuitable extinguishing media	: Do not use water jet.	
5.2 Special hazards arising f	rom the substance or mixture	
Hazards from the substance or mixture	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.	
Hazardous combustion products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides	
5.3 Advice for firefighters		
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.	
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.	



# **SECTION 6: Accidental release measures**

6.1 Personal precautions, pro	tective equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.3 Methods and materials fo	r containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

# **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

## 7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## **SECTION 7: Handling and storage**

## 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Seveso Directive - Reporting thresholds

Danger criteria

	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne

#### 7.3 Specific end use(s)

Recommendations	: Not available
Industrial sector specific	: Not available

Industrial sector specific solutions

## **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

#### 8.1 Control parameters

Date of previous issue

Occupational exposure limits

<ul> <li>STEL: 100 ppm 15 minutes.</li> <li>STEL: 550 mg/m<sup>3</sup> 15 minutes.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin.</li> <li>STEL: 440 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 100 ppm 15 minutes.</li> <li>TWA: 220 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 50 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TWA: 80 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>TEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TWA: 42 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 10 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs</li> </ul>
<ul> <li>STEL: 100 ppm 15 minutes.</li> <li>STEL: 550 mg/m<sup>3</sup> 15 minutes.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin.</li> <li>STEL: 440 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 100 ppm 15 minutes.</li> <li>TWA: 220 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 20 mg/m<sup>3</sup> 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TWA: 80 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>TEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 42 mg/m<sup>3</sup> 8 hours.</li> </ul>
<ul> <li>STEL: 100 ppm 15 minutes.</li> <li>STEL: 550 mg/m<sup>3</sup> 15 minutes.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin.</li> <li>STEL: 440 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 100 ppm 15 minutes.</li> <li>TWA: 220 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 20 mg/m<sup>3</sup> 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TWA: 80 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>TWA: 20 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>TEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>TEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>TEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 42 mg/m<sup>3</sup> 8 hours.</li> </ul>
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<ul> <li>STEL: 100 ppm 15 minutes.</li> <li>STEL: 550 mg/m<sup>3</sup> 15 minutes.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin.</li> <li>STEL: 440 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 100 ppm 15 minutes.</li> <li>TWA: 220 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 50 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 50 ppm 15 minutes.</li> <li>TWA: 80 mg/m<sup>3</sup> 8 hours.</li> </ul>
<ul> <li>STEL: 100 ppm 15 minutes.</li> <li>STEL: 550 mg/m<sup>3</sup> 15 minutes.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin.</li> <li>STEL: 440 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 100 ppm 15 minutes.</li> <li>TWA: 220 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 50 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 210 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 50 ppm 15 minutes.</li> </ul>
<ul> <li>STEL: 100 ppm 15 minutes.</li> <li>STEL: 550 mg/m<sup>3</sup> 15 minutes.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin.</li> <li>STEL: 440 mg/m<sup>3</sup> 15 minutes.</li> <li>STEL: 100 ppm 15 minutes.</li> <li>TWA: 220 mg/m<sup>3</sup> 8 hours.</li> <li>TWA: 50 ppm 8 hours.</li> <li>Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).</li> </ul>
STEL: 100 ppm 15 minutes. STEL: 550 mg/m <sup>3</sup> 15 minutes. Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin. STEL: 440 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours. Institute of Occupational Health, Ministry of Social Affairs
STEL: 100 ppm 15 minutes. STEL: 550 mg/m <sup>3</sup> 15 minutes. Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin. STEL: 440 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.
STEL: 100 ppm 15 minutes. STEL: 550 mg/m <sup>3</sup> 15 minutes. Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin. STEL: 440 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m <sup>3</sup> 8 hours.
STEL: 100 ppm 15 minutes. STEL: 550 mg/m <sup>3</sup> 15 minutes. Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin. STEL: 440 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes.
STEL: 100 ppm 15 minutes. STEL: 550 mg/m <sup>3</sup> 15 minutes. Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin. STEL: 440 mg/m <sup>3</sup> 15 minutes.
STEL: 100 ppm 15 minutes. STEL: 550 mg/m <sup>3</sup> 15 minutes. Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin.
STEL: 100 ppm 15 minutes. STEL: 550 mg/m <sup>3</sup> 15 minutes. Institute of Occupational Health, Ministry of Social Affairs
STEL: 100 ppm 15 minutes. STEL: 550 mg/m³ 15 minutes.
STEL: 100 ppm 15 minutes.
TWA: 270 mg/m <sup>3</sup> 8 hours.
TWA: 50 ppm 8 hours.
(Finland, 6/2018). Absorbed through skin.
Institute of Occupational Health, Ministry of Social Affairs
TWA: 150 ppm 8 hours.
TWA: 720 mg/m <sup>3</sup> 8 hours.
STEL: 200 ppm 15 minutes.
STEL: 960 mg/m <sup>3</sup> 15 minutes.
Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019).
Institute of Occupational Health Ministry of Social Affairs

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## **SECTION 8: Exposure controls/personal protection**

## (Finland, 12/2019). Absorbed through skin.

STEL: 82 mg/m<sup>3</sup> 15 minutes.

STEL: 20 ppm 15 minutes.

TWA: 41 mg/m<sup>3</sup> 8 hours. TWA: 10 ppm 8 hours.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

## **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
n-butyl acetate	DNEL	Long term Oral	3.4 mg/kg	General	Systemic
		-	bw/day	population	
	DNEL	Long term Dermal	3.4 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	7 mg/kg	Workers	Systemic
		J	bw/day		,
	DNEL	Long term	12 mg/m <sup>3</sup>	General	Systemic
		Inhalation	·_ ··· 3,····	population	-,
	DNEL	Long term	48 mg/m³	Workers	Systemic
		Inhalation			-,
	DNEL	Long term	102.34 mg/	General	Local
	DITE	Inhalation	m <sup>3</sup>	population	Loodi
	DNEL	Long term	480 mg/m <sup>3</sup>	Workers	Local
		Inhalation	Noo mg/m		
	DNEL	Short term	859.7 mg/	General	Local
		Inhalation	m <sup>3</sup>	population	Local
	DNEL	Short term	859.7 mg/	General	Systemic
	DINLL	Inhalation	m <sup>3</sup>	population	Systemic
	DNEL	Short term	960 mg/m <sup>3</sup>	Workers	Local
	DINEL		900 mg/m	WUIKEIS	Local
	DNEL	Inhalation	$060 m g/m^{3}$	Workers	Sustamia
	DINEL	Short term	960 mg/m <sup>3</sup>	WORKERS	Systemic
		Inhalation	1.0		
Reaction mass of ethylbenzene and	DNEL	Long term Oral	1.6 mg/kg	General	Systemic
xylene			bw/day	population	
	DNEL	Long term	14.8 mg/m <sup>3</sup>		Systemic
		Inhalation	/ 2	population	
	DNEL	Long term	77 mg/m³	Workers	Systemic
	<b>D</b>	Inhalation	400 "		
	DNEL	Long term Dermal	108 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Short term	289 mg/m <sup>3</sup>	Workers	Local
		Inhalation			
	DNEL	Short term	289 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation			
4-methylpentan-2-one	DNEL	Long term Oral	4.2 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	4.2 mg/kg	General	Systemic
			bw/day	population	
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ECTION 8: Exposure	controls/p	ersonal prote	ction		
-	DNEL	Long term Dermal	11.8 mg/	Workers	Systemic
			kg bw/day		
	DNEL	Long term Inhalation	14.7 mg/m <sup>3</sup>		Local
	DNEL	Long term	14.7 mg/m <sup>3</sup>	population General	Systemic
	DINCL	Inhalation	14.7 mg/m	population	Systemic
	DNEL	Long term	83 mg/m <sup>3</sup>	Workers	Local
		Inhalation	00g,		
	DNEL	Long term	83 mg/m³	Workers	Systemic
		Inhalation			
	DNEL	Short term	155.2 mg/	General	Local
	DNEL	Inhalation Short term	$m^{3}$	population General	Svotomio
	DINEL	Inhalation	155.2 mg/ m³	population	Systemic
	DNEL	Short term	208 mg/m <sup>3</sup>	Workers	Local
		Inhalation	200 mg/m	Wonters	Loodi
	DNEL	Short term	208 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation	Ū		
methyl methacrylate	DNEL	Long term Dermal	8.2 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	13.67 mg/	Workers	Systemic
	DNEL	Long torm	kg bw/day 74.3 mg/m³	General	Systemic
		Long term Inhalation	74.5 mg/m°	population	Systemic
	DNEL	Long term	104 mg/m <sup>3</sup>	General	Local
		Inhalation		population	2000
	DNEL	Long term	208 mg/m <sup>3</sup>	Workers	Local
		Inhalation			
	DNEL	Long term	208 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation	0	Concret	0.454
4-morpholinecarbaldehyde	DNEL	Long term Oral	8 mg/kg	General	Systemic
	DNEL	Long term Dermal	bw/day 8 mg/kg	population General	Systemic
			bw/day	population	Gysternic
	DNEL	Long term Dermal	14 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Long term	29 mg/m³	General	Systemic
		Inhalation		population	
	DNEL	Long term	98 mg/m³	Workers	Systemic
		Inhalation	4	Concret	Overtainet.
cyclohexanone	DNEL	Short term Dermal	1 mg/kg	General	Systemic
	DNEL	Long term Dermal	bw/day 1 mg/kg	population General	Systemic
			bw/day	population	Gysternic
	DNEL	Short term Oral	1.5 mg/kg	General	Systemic
			bw/day	population	,
	DNEL	Long term Oral	1.5 mg/kg	General	Systemic
	<b>_</b>		bw/day	population	
	DNEL	Short term Dermal	4 mg/kg	Workers	Systemic
		Long torm Dorme	bw/day	Workers	Sustamia
	DNEL	Long term Dermal	4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term	10 mg/m <sup>3</sup>	General	Systemic
		Inhalation		population	0,0001110
	DNEL	Long term	20 mg/m³	General	Local
		Inhalation	-	population	
	DNEL	Short term	20 mg/m³	General	Systemic
	<b></b>	Inhalation		population	
	DNEL	Short term	40 mg/m <sup>3</sup>	General	Local
		Inhalation	$10 ma/m^{3}$	population Workers	
	DNEL	Long term Inhalation	40 mg/m³	VVUIKEIS	Local
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SECTION 8: Exposure controls/personal protection					
	DNEL	Long term Inhalation	40 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	80 mg/m³	Workers	Local
	DNEL	Short term Inhalation	80 mg/m <sup>3</sup>	Workers	Systemic

## **PNECs**

No PNECs available.

8.2 Exposure controls			
Appropriate engineering controls	ventilation or other engin contaminants below any controls also need to kee	ventilation. Use process enclosur leering controls to keep worker ex recommended or statutory limits. ep gas, vapor or dust concentration plosion-proof ventilation equipment	posure to airborne The engineering ons below any lower
Individual protection meas	<u>es</u>		
Hygiene measures	before eating, smoking a Appropriate techniques s Wash contaminated clot	and face thoroughly after handling and using the lavatory and at the e should be used to remove potentia hing before reusing. Ensure that a to the workstation location.	end of the working period. ally contaminated clothing.
Eye/face protection	assessment indicates the gases or dusts. If contact	ng with an approved standard sho is is necessary to avoid exposure ct is possible, the following protec ndicates a higher degree of protec	to liquid splashes, mists, tion should be worn,
Skin protection			
Hand protection	be worn at all times whe this is necessary. Consi check during use that the should be noted that the different for different glov several substances, the estimated.	ervious gloves complying with an a n handling chemical products if a dering the parameters specified b e gloves are still retaining their pro- time to breakthrough for any glov ve manufacturers. In the case of protection time of the gloves cann	risk assessment indicates y the glove manufacturer, otective properties. It e material may be mixtures, consisting of not be accurately
	protection class of 6 (bre recommended. Recommended. Recommended. Recommended When only brief contact (breakthrough time >30) Recommended gloves: N	uently repeated contact may occu eakthrough time >480 minutes acc nended gloves: Viton ® or Nitrile, is expected, a glove with protectic minutes according to EN374) is re Nitrile, thickness ≥ 0.12 mm. ed regularly and if there is any sig	cording to EN374) is thickness ≥ 0.38 mm. on class of 2 or higher ecommended.
	The performance or effe chemical damage and pe	ctiveness of the glove may be red oor maintenance.	luced by physical/
		at the final choice of type of glove opriate and takes into account the ser's risk assessment.	
Body protection	being performed and the before handling this proc wear anti-static protectiv discharges, clothing sho	pment for the body should be sele risks involved and should be app luct. When there is a risk of igniti e clothing. For the greatest prote uld include anti-static overalls, boo 1149 for further information on ma ethods.	roved by a specialist on from static electricity, ction from static ots and gloves. Refer to
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# SECTION 8: Exposure controls/personal protection

Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

# **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

<u>Appearance</u>		
Physical state	:	Liquid.
Color	:	Silver.
Odor	:	Characteristic.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point/freezing point	:	Not available.
Initial boiling point and	:	Not available.
boiling range		
Flash point	:	Closed cup: 28°C
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Upper/lower flammability or explosive limits	:	Not available.
Vapor pressure		Not available.
Vapor density	-	Highest known value: 4.6 (Air = 1) (2-methoxy-1-methylethyl acetate).
vapor density	•	Weighted average: $4.06$ (Air = 1) (2-methody-1-methylethyl acetate).
Density	:	0.984 g/cm <sup>3</sup>
Solubility(ies)	:	Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/	:	Not available.
water		
Auto-ignition temperature	:	Not available.
Decomposition temperature	-	Not available.
Viscosity	:	Kinematic (room temperature): 11.18 cm²/s Kinematic (40°C): 1.01 cm²/s

# **SECTION 10: Stability and reactivity**

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10.4 Conditions to avoid	: Avoid all possible sources of braze, solder, drill, grind or ex	ignition (spark or flame). Do no opose containers to heat or sou	•		
10.3 Possibility of hazardous reactions	: Under normal conditions of st	orage and use, hazardous read	tions will not occur.		
10.2 Chemical stability	: The product is stable.				
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.				

## **SECTION 10: Stability and reactivity**

10.5 Incompatible materials	: Reactive or incompatible with the following materials:
	oxidizing materials

10.6 Hazardous	: Under normal conditions of storage and use, hazardous decomposition products
decomposition products	should not be produced.

# **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

## Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-butyl acetate	LC50 Inhalation Gas.	Rat	390 ppm	4 hours
	LC50 Inhalation Vapor	Mouse	6 g/m³	2 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Intraperitoneal	Mouse	1230 mg/kg	-
	LD50 Oral	Guinea pig	4700 mg/kg	-
	LD50 Oral	Mouse	6 g/kg	-
	LD50 Oral	Rabbit	3200 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Reaction mass of	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
ethylbenzene and xylene				
4-methylpentan-2-one	LD50 Intraperitoneal	Guinea pig	800 mg/kg	-
	LD50 Intraperitoneal	Mouse	268 mg/kg	-
	LD50 Intraperitoneal	Rat	400 mg/kg	-
	LD50 Oral	Guinea pig	1600 mg/kg	-
	LD50 Oral	Mouse	1900 mg/kg	_
	LD50 Oral	Mouse	2850 mg/kg	_
	LD50 Oral	Rat	2080 mg/kg	
	LD50 Oral	Rat	4600 mg/kg	
methyl methacrylate	LC50 Inhalation Vapor	Mouse	18500 mg/m <sup>3</sup>	2 hours
	LC50 Inhalation Vapor	Rat	78000 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	>5 g/kg	4 110015
	LD50 Intraperitoneal			-
		Guinea pig Mouse	1890 mg/kg	-
	LD50 Intraperitoneal	Rat	945 mg/kg	-
	LD50 Intraperitoneal		1328 mg/kg	-
	LD50 Oral	Guinea pig	5954 mg/kg	-
	LD50 Oral	Mouse	3625 mg/kg	-
	LD50 Oral	Rabbit	8700 mg/kg	-
	LD50 Oral	Rat	7872 mg/kg	-
	LD50 Subcutaneous	Guinea pig	5954 mg/kg	-
	LD50 Subcutaneous	Mouse	5954 mg/kg	-
	LD50 Subcutaneous	Rat	7088 mg/kg	-
4-morpholinecarbaldehyde	LD50 Oral	Rat	6500 uL/kg	-
cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
	LD50 Dermal	Rabbit	1 mL/kg	-
	LD50 Intraperitoneal	Guinea pig	930 mg/kg	-
	LD50 Intraperitoneal	Mouse	1230 mg/kg	-
	LD50 Intraperitoneal	Mouse	1230 mg/kg	-
	LD50 Intraperitoneal	Rabbit	1540 mg/kg	-
	LD50 Intraperitoneal	Rabbit	1540 mg/kg	-
	LD50 Intraperitoneal	Rat	1130 mg/kg	-
	LD50 Intraperitoneal	Rat	1130 mg/kg	-
	LD50 Oral	Mouse	1400 mg/kg	-
	LD50 Oral	Rat	1800 mg/kg	-
	LD50 Oral	Rat	1620 uL/kg	-
	LD50 Subcutaneous	Rat	2170 mg/kg	-
Conclusion/Summary	: Not available.	1	1	

Irritation/Corrosion



# **SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-butyl acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Reaction mass of	Eyes - Mild irritant	Rabbit	-	87 mg	-
ethylbenzene and xylene	Eyes - Severe irritant	Rabbit		24 hours 5	
	Lyes - Severe initant	Tabbit	-	mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 UI	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Moderate irritant	Rabbit	-	100 %	-
4-methylpentan-2-one	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
	Eyes - Severe irritant	Rabbit		UI 40 mg	
	Skin - Mild irritant	Rabbit	1	24 hours 500	-
		Rabbit		mg	
4-morpholinecarbaldehyde	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
a vala h a van an a		Dabbit		mg	
cyclohexanone	Eyes - Severe irritant	Rabbit	-	24 hours 250 ug	-
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Conclusion/Summary	: Not available.	I			I
Sensitization					
Conclusion/Summary	: Not available.				
•	. Not available.				
Mutagenicity					
Conclusion/Summary	: Not available.				
<b>Carcinogenicity</b>					
Conclusion/Summary	: Not available.				
Reproductive toxicity					
<b>Conclusion/Summary</b>	: Not available.				

**Conclusion/Summary** : Not available. <u>Specific target organ toxicity (single exposure)</u>

Product/ingredient name	Category	Route of exposure	Target organs
n-butyl acetate	Category 3	-	Narcotic effects
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
Reaction mass of ethylbenzene and xylene	Category 3	-	Respiratory tract irritation
4-methylpentan-2-one	Category 3	-	Narcotic effects
aromatic hydrocarbons, C9	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclic, aromatics (2-25%)	Category 3	-	Narcotic effects
methyl methacrylate	Category 3	-	Respiratory tract irritation

## Specific target organ toxicity (repeated exposure)

**Teratogenicity** 



# **SECTION 11: Toxicological information**

Product/ingredient name	Category	Route of exposure	Target organs
Reaction mass of ethylbenzene and xylene Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclic, aromatics (2-25%)	Category 2 Category 1	- inhalation	-

## Aspiration hazard

Product/ingredient name	Result
Reaction mass of ethylbenzene and xylene aromatic hydrocarbons, C9 Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclic, aromatics (2-25%)	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

#### Information on the likely : Not available. routes of exposure

# Potential acute health effects

Folential acule health e	
Eye contact	: Causes serious eye irritation.
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: Can cause central nervous system (CNS) depression.

## Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

<u>Short term exposure</u>			
Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
Long term exposure			
Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
Potential chronic health eff	<u>ects</u>		
Not available.			
Conclusion/Summary	: Not available.		
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<b>SECTION 11: Toxic</b>	ological information
General	: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.
Other information	: Not available.

# **SECTION 12: Ecological information**

## 12.1 Toxicity

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment, but contains substance(s) hazardous to the environment. See section 3 for details.

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 100000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 185000 µg/l Marine water	Fish - Menidia beryllina	96 hours
	Acute LC50 62000 µg/l Fresh water	Fish - Danio rerio	96 hours
Reaction mass of ethylbenzene and xylene	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
4-methylpentan-2-one	Acute LC50 505000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
· · · · · · · · · · · · · · · · · · ·	Acute LC50 540000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 537000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 78 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 168 mg/l Fresh water	Fish - Pimephales promelas - Embryo	33 days
methyl methacrylate	Acute LC50 191000 µg/l Fresh water	Fish - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Acute LC50 159100 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 160200 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 150000 µg/l Fresh water	Fish - Pimephales promelas - Adult	96 hours
	Acute LC50 130000 µg/l Fresh water	Fish - Pimephales promelas - Adult	96 hours
cyclohexanone	Acute EC50 32.9 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute LC50 630000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 527000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 732000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

**Conclusion/Summary** : Not available.

## 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

-

## 12.3 Bioaccumulative potential



Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate	2.3	-	low
2-methoxy-1-methylethyl	1.2	-	low
acetate			
Reaction mass of	3.12	8.1 to 25.9	low
ethylbenzene and xylene			
4-methylpentan-2-one	1.9	-	low
methyl methacrylate	1.38	-	low
4-morpholinecarbaldehyde	-	<1.9	low
cyclohexanone	0.86	-	low

12.4 Mobility in soil	
Soil/water partition	: Not available.
coefficient (Koc)	
Mobility	: Not available.

## 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## **12.6 Other adverse effects** : No known significant effects or critical hazards.

# **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

<u>Product</u>	
Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	: The classification of the product may meet the criteria for a hazardous waste.
Disposal considerations	: Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

## European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation		
EWC 08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances		
Packaging			
Methods of disposal	<ul> <li>The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.</li> </ul>		
Disposal considerations			
ate of issue/Date of revision	: 1-10-2022	Version : 1	
te of previous issue	: No previous validation	16/20	AkzoNobel

## **SECTION 13: Disposal considerations**

Special precautions
 This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

•			
	ADR/RID	IMDG	ΙΑΤΑ
14.1 UN number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	111	III	111
14.5 Environmental hazards	No.	No.	No.

## Additional information

ADR/RID	: Viscous liquid exception This class 3 viscous liquid is not subject to regulation in
	packagings up to 450 L according to 2.2.3.1.5.1.
	Tunnel code (D/E)

IMDG

: <u>Emergency schedules</u> F-E, \_S-E\_ <u>Viscous liquid exception</u> This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.

**14.6 Special precautions for user**: **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk	: Not applicable.
according to IMO	
instruments	

# **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

## Annex XIV - List of substances subject to authorization

## Annex XIV

None of the components are listed.

## Substances of very high concern

None of the components are listed.



# SECTION 15: Regulatory information

SECTION 15: Regula	tory information
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
<u>Other EU regulations</u> VOC	: The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.
VOC for Ready-for-Use Mixture	: Not applicable.
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed
Ozone depleting substanc Not listed.	<u>es (1005/2009/EU)</u>
Prior Informed Consent (P Not listed.	<u>IC) (649/2012/EU)</u>
<u>Seveso Directive</u> This product is controlled un <u>Danger criteria</u>	der the Seveso Directive.
Category P5c	
Industrial use	: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.
NACE	: Not available.
UC62	: Not available.
International regulations Chemical Weapon Conventi Not listed.	ion List Schedules I, II & III Chemicals
Montreal Protocol Not listed.	
Stockholm Convention on F Not listed.	Persistent Organic Pollutants
Rotterdam Convention on F Not listed.	Prior Informed Consent (PIC)
UNECE Aarhus Protocol on Not listed.	POPs and Heavy Metals
Inventory list	

Europe

: Not determined.



# **SECTION 15: Regulatory information**

15.2 Chemical Safety Assessment : No Chemical Safety Assessment has been carried out.

# **SECTION 16: Other information**

	Indicates information that has changed from previously issued version.
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Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.
-	1272/2008]
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	N/A = Not available
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	SGG = Segregation Group
	vPvB = Very Persistent and Very Bioaccumulative

## Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Eye Irrit. 2, H319	Calculation method
Carc. 2, H351	Calculation method
STOT SE 3, H336	Calculation method

## Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated
	exposure.
H373	May cause damage to organs through prolonged or repeated
	exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

## Full text of classifications [CLP/GHS]

Date of previous issue	: No previous validation	19/20	AkzoNobel	
Date of issue/Date of revision	: 1-10-2022	Version :1		
STOT RE 2	SPECIFI	EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2		
STOT RE 1		SPECIFIC TARGET ORGAN TOXICITY (REPEATED		
Skin Sens. 1	SKIN SE	SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1		
Skin Irrit. 2				
Flam. Liq. 3		FLAMMABLE LIQUIDS - Category 3		
Flam. Liq. 2		FLAMMABLE LIQUIDS - Category 2		
Eye Irrit. 2		SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2		
Carc. 2		OGENICITY - Category 2		
Aqualle Onionie 5 Asp. Tox. 1		FION HAZARD (LONG-TERM) - Calego	Jiy S	
Aquatic Chronic 2 Aquatic Chronic 3		C HAZARD (LONG-TERM) - Catego C HAZARD (LONG-TERM) - Catego		
Acute Tox. 4		FOXICITY - Category 4	om ( )	

SECTION 16: Other information				
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3			
Date of printing	: 3 October 2022			
Date of issue/ Date of revision	: 1 October 2022			
Date of previous issue	: No previous validation			
Version	: 1			
Unique ID	:			

#### Notice to reader

#### FOR PROFESSIONAL USE ONLY

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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