SAFETY DATA SHEET

8-114 Scratch Resistant Fast Repair Clear

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

1.1 Product identifier

Product name : 8-114 Scratch Resistant Fast Repair Clear

Product code : 8-114

Product description : Not available.

Product type : Liquid.

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

Identified uses
Professional spray painting, near-industrial setting Use in coatings - Clearcoat

Uses advised against

Not applicable.

1.3 Details of the supplier of the safety data sheet

Valspar b.v.
Zuiveringweg 89
8243 PE Lelystad
The Netherlands
tel: +31 (0)320 292200

e-mail address of person responsible for this SDS : msds@valspar.com

National contact

Sherwin-Williams UK Limited
Avenue One Station Lane, Witney, United Kingdom
Oxfordshire OX28 4XR

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : UK: 0-800-014-8126
CALL: +(44)-870-8200418 (Hours of operation - 24 hours)

Supplier

Telephone number : Call: +31 (0)320 292200 (8:30AM - 5PM)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Flam. Liq. 2, H225
Eye Irrit. 2, H319
Skin Sens. 1, H317
Carc. 2, H351
STOT SE 3, H336
Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 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.

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms :

Signal word : Danger

Hazard statements : Highly flammable liquid and vapour.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Suspected of causing cancer.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Obtain special instructions before use. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapour.

Response : IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage : Store in a well-ventilated place. Keep container tightly closed.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

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 : Mixture

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Type
acetone	REACH #: 01-2119471330-49 EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8	≥10 - ≤25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
4-chloro-α,α,α-trifluorotoluene	REACH #: 01-2119857280-40 EC: 202-681-1 CAS: 98-56-6	≥10 - ≤17	Flam. Liq. 3, H226 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	[1]
heptan-2-one	REACH #: 01-2119902391-49 EC: 203-767-1 CAS: 110-43-0 Index: 606-024-00-3	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332	[1] [2]
4-methylpentan-2-one	REACH #: 01-2119473980-30 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]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≤3	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy-	REACH #: 01-0000015075-76 CAS: 104810-48-2	<1	Skin Sens. 1A, H317 Aquatic Chronic 2, H411	[1]
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-	REACH #: 01-0000015075-76 CAS: 104810-47-1	<1	Skin Sens. 1A, H317 Aquatic Chronic 2, H411	[1]
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	REACH #: 01-2119537297-32 EC: 255-437-1 CAS: 41556-26-7	≤0.56	Skin Sens. 1A, H317 Repr. 2, H361 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≤0.3	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
dioctyltin dilaurate	REACH #: 01-2119979527-19 EC: 222-883-3 CAS: 3648-18-8 Index: 050-031-00-9	<0.3	Repr. 1B, H360D STOT RE 1, H372 (immune system)	[1] [2]
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	EC: 280-060-4 CAS: 82919-37-7	≤0.18	Skin Sens. 1A, H317 Repr. 2, H361 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1,	[1]

SECTION 3: Composition/information on ingredients

			H410 (M=1)	
2-butoxyethanol	REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2 Index: 603-014-00-0	<0.1	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1] [2]
acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	<0.1	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 4, H332 Eye Irrit. 2, H319 **See Section 16 for the full text of the H statements declared above.**	[1] [2]

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.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

SECTION 4: First aid measures

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
redness

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Highly flammable liquid and vapour. 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. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds
carbonyl halides

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

SECTION 6: Accidental release measures

For emergency responders : If specialised 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 spilt 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). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for 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 the 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. 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 vapour or mist. Avoid release to the environment. 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.

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 oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

SECTION 7: Handling and storage

Seveso Directive - Reporting thresholds

Danger criteria

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

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
acetone	**EH40/2005 WELs (United Kingdom (UK), 1/2020).** STEL: 3620 mg/m³ 15 minutes. STEL: 1500 ppm 15 minutes. TWA: 500 ppm 8 hours. TWA: 1210 mg/m³ 8 hours.
n-butyl acetate	**EH40/2005 WELs (United Kingdom (UK), 1/2020).** STEL: 966 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 724 mg/m³ 8 hours. TWA: 150 ppm 8 hours.
heptan-2-one	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 475 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 237 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
4-methylpentan-2-one	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 416 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 208 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
2-methoxy-1-methylethyl acetate	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 548 mg/m³ 15 minutes. TWA: 50 ppm 8 hours. TWA: 274 mg/m³ 8 hours. STEL: 100 ppm 15 minutes.
1-methoxy-2-propanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 560 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 375 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
dioctyltin dilaurate	**EH40/2005 WELs (United Kingdom (UK), 1/2020). [tin compounds, organic, except cyhexatin (ISO) as Sn] Absorbed through skin.** STEL: 0.2 mg/m³, (as Sn) 15 minutes. TWA: 0.1 mg/m³, (as Sn) 8 hours.
2-butoxyethanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 50 ppm 15 minutes. TWA: 25 ppm 8 hours. STEL: 246 mg/m³ 15 minutes. TWA: 123 mg/m³ 8 hours.

SECTION 8: Exposure controls/personal protection

acetonitrile	**EH40/2005 WELs (United Kingdom (UK), 1/2020).** STEL: 102 mg/m³ 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m³ 8 hours.

Recommended monitoring procedures : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
acetone	DNEL	Long term Oral	62 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	62 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	186 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	200 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	1210 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	2420 mg/m³	Workers	Local
n-butyl acetate	DNEL	Long term Inhalation	35.7 mg/m³	General population [Consumers]	Local
	DNEL	Short term Inhalation	300 mg/m³	General population [Consumers]	Local
	DNEL	Short term Dermal	6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	2 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Oral	2 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	300 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	600 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	300 mg/m³	Workers	Local
	DNEL	Short term Inhalation	600 mg/m³	Workers	Local
	DNEL	Long term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	7 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	12 mg/m³	General population	Systemic
	DNEL	Long term	35.7 mg/m³	General	Local

SECTION 8: Exposure controls/personal protection

		Inhalation		population	
	DNEL	Long term Inhalation	48 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	300 mg/m³	General population	Local
	DNEL	Short term Inhalation	300 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	300 mg/m³	Workers	Local
	DNEL	Short term Inhalation	600 mg/m³	Workers	Local
	DNEL	Short term Inhalation	600 mg/m³	Workers	Systemic
4-chloro-α,α,α-trifluorotoluene	DNEL	Long term Dermal	0.0176 mg/cm² skin	Workers	Local
	DNEL	Long term Dermal	0.0088 mg/cm² skin	General population [Consumers]	Local
	DNEL	Long term Oral	0.0005 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.0005 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.0013 mg/m³	General population	Systemic
	DNEL	Short term Dermal	8.8 ng/cm²	General population	Local
	DNEL	Long term Dermal	0.017 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	17.6 ng/cm²	Workers	Local
	DNEL	Long term Inhalation	0.029 mg/m³	Workers	Systemic
heptan-2-one	DNEL	Long term Oral	23.32 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	23.32 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	54.27 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	84.31 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	394.25 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	1516 mg/m³	Workers	Systemic
4-methylpentan-2-one	DNEL	Long term Dermal	4.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	11.8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	14.7 mg/m³	General population	Local
	DNEL	Long term Inhalation	14.7 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	83 mg/m³	Workers	Local
	DNEL	Long term Inhalation	83 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	155.2 mg/m³	General population	Local
	DNEL	Short term Inhalation	155.2 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	208 mg/m³	Workers	Local
	DNEL	Short term Inhalation	208 mg/m³	Workers	Systemic

SECTION 8: Exposure controls/personal protection

	DNEL	Long term Oral	4.2 mg/kg bw/day	General population	Systemic
2-methoxy-1-methylethyl acetate	DNEL	Long term Dermal	796 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	33 mg/m³	General population	Local
	DNEL	Long term Inhalation	33 mg/m³	General population	Systemic
	DNEL	Long term Oral	36 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	275 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	320 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	550 mg/m³	Workers	Local
	DNEL	Long term Dermal	796 mg/kg bw/day	Workers	Systemic
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy-	DNEL	Long term Inhalation	0.35 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	0.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.085 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	0.25 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.025 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.025 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.025 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.085 mg/m³	General population	Systemic
	DNEL	Long term Dermal	0.25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.35 mg/m³	Workers	Systemic
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-	DNEL	Long term Inhalation	0.35 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	0.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.085 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	0.25 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.025 mg/kg bw/day	General population [Consumers]	Systemic
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	DNEL	Long term Inhalation	3.53 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	2 mg/kg	Workers	Systemic

SECTION 8: Exposure controls/personal protection

			bw/day		
	DNEL	Long term Inhalation	0.87 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.5 mg/kg bw/day	General population [Consumers]	Systemic
1-methoxy-2-propanol	DNEL	Long term Dermal	51 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	33 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	43.9 mg/m³	General population	Systemic
	DNEL	Long term Dermal	78 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	183 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	369 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	553.5 mg/m³	Workers	Local
	DNEL	Short term Inhalation	553.5 mg/m³	Workers	Systemic
dioctyltin dilaurate	DNEL	Long term Oral	0.0005 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.0009 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	0.0035 mg/m³	Workers	Systemic
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	DNEL	Long term Inhalation	3.53 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.87 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.5 mg/kg bw/day	General population [Consumers]	Systemic
2-butoxyethanol	DNEL	Long term Oral	6.3 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	26.7 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	59 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	98 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	147 mg/m³	General population	Local
	DNEL	Short term Inhalation	246 mg/m³	Workers	Local
	DNEL	Short term Inhalation	426 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	1091 mg/m³	Workers	Systemic
acetonitrile	DNEL	Long term Oral	0.4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0.6 mg/kg	General	Systemic

SECTION 8: Exposure controls/personal protection

	DNEL	Long term Dermal	bw/day 1.2 mg/kg bw/day	population General population	Systemic
	DNEL	Long term Inhalation	2.4 mg/m³	General population	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
acetone	Fresh water	10.6 mg/l	Assessment Factors
	Marine	1.06 mg/l	Assessment Factors
	Sewage Treatment Plant	100 mg/l	Assessment Factors
	Fresh water sediment	30.4 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	3.04 mg/kg dwt	Equilibrium Partitioning
	Soil	29.5 mg/kg dwt	Equilibrium Partitioning
n-butyl acetate	Fresh water	0.18 mg/l	-
	Marine	0.018 mg/l	-
	Sewage Treatment Plant	35.6 mg/l	-
	Fresh water sediment	0.981 mg/kg dwt	-
	Marine water sediment	0.0981 mg/kg dwt	-
	Soil	0.0903 mg/kg dwt	-
4-chloro-α,α,α-trifluorotoluene	Fresh water	2 µg/l	Assessment Factors
	Marine water	0.2 µg/l	Assessment Factors
	Sewage Treatment Plant	0.032 mg/l	Assessment Factors
	Fresh water sediment	0.022 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.0022 mg/kg dwt	Equilibrium Partitioning
	Soil	0.026 mg/kg dwt	Equilibrium Partitioning
heptan-2-one	Fresh water	0.0982 mg/l	-
	Marine water	0.00982 mg/l	-
	Sewage Treatment Plant	12.5 mg/l	-
	Fresh water sediment	1.89 mg/kg dwt	-
	Marine water sediment	0.189 mg/kg dwt	-
	Soil	0.321 mg/kg dwt	-
4-methylpentan-2-one	Fresh water	0.6 mg/l	-
	Marine	0.06 mg/l	-
	Sewage Treatment Plant	27.5 mg/l	-
	Fresh water sediment	8.27 mg/kg dwt	-
	Marine water sediment	0.83 mg/kg dwt	-
	Soil	1.3 mg/kg dwt	-
2-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l	-
	Marine	0.0635 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
	Fresh water sediment	3.29 mg/kg dwt	-
	Marine water sediment	0.329 mg/kg dwt	-
	Soil	0.29 mg/kg dwt	-
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy-	Fresh water	0.0023 mg/l	-
	Marine water	0.00023 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	3.06 mg/kg dwt	-
	Marine water sediment	0.306 mg/kg dwt	-
	Soil	2 mg/kg dwt	-
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-	Fresh water	0.0023 mg/l	-

SECTION 8: Exposure controls/personal protection

	Marine water	0.00023 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	3.06 mg/kg dwt	-
	Marine water sediment	0.306 mg/kg dwt	-
	Soil	2 mg/kg dwt	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	Fresh water	0.0022 mg/l	-
	Marine water	0.00022 mg/l	-
	Sewage Treatment Plant	1 mg/l	-
	Fresh water sediment	1.05 mg/kg dwt	-
	Marine water sediment	0.11 mg/kg dwt	-
	Soil	0.21 mg/kg dwt	-
1-methoxy-2-propanol	Fresh water	10 mg/l	-
	Marine water	1 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
	Fresh water sediment	52.3 mg/kg dwt	-
	Marine water sediment	5.2 mg/kg dwt	-
	Soil	4.59 mg/kg dwt	-
dioctyltin dilaurate	Fresh water	0.002 µg/l	-
	Marine water	0.0002 µg/l	-
	Sewage Treatment Plant	100 mg/l	-
	Fresh water sediment	0.028 mg/kg dwt	-
	Marine water sediment	0.0028 mg/kg dwt	-
	Soil	0.006 mg/kg dwt	-
	Secondary Poisoning	0.02 mg/kg	-
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Fresh water	0.0022 mg/l	-
	Marine water	0.00022 mg/l	-
	Sewage Treatment Plant	1 mg/l	-
	Fresh water sediment	1.05 mg/kg dwt	-
	Marine water sediment	0.11 mg/kg dwt	-
	Soil	0.21 mg/kg dwt	-
2-butoxyethanol	Fresh water	8.8 mg/l	-
	Marine water	0.88 mg/l	-
	Sewage Treatment Plant	463 mg/l	-
	Fresh water sediment	34.6 mg/kg dwt	-
	Marine water sediment	3.46 mg/kg dwt	-
	Soil	2.33 mg/kg dwt	-
	Secondary Poisoning	20 mg/kg	-

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 8: Exposure controls/personal protection

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: chemical splash goggles and/or face shield.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
> 8 hours (breakthrough time): Recommended EN 374 polyvinyl alcohol (PVA) butyl rubber >= 0.7 mm
< 1 hour (breakthrough time): Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber - NBR (>= 0.35 mm). Only suitable as splash protection. Only suitable for brief exposure. In the event of contamination, change protective gloves immediately.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Recommended: Cotton or cotton/synthetic overalls or coveralls are normally suitable.

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. Recommended: EN 405:2001 + A1:2009 organic vapour (Type A) and particulate filter FFA2P3 R D

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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Colourless.

Odour : Aromatic.

Odour threshold : Not available.

Melting point/freezing point : Not applicable.

Initial boiling point and boiling range : >56°C (>132.8°F)

Flammability (solid, gas) : Not available.

Upper/lower flammability or explosive limits : Lower: 1.4%
Upper: 13%

Flash point : Closed cup: -6°C (21.2°F)

Auto-ignition temperature : 393°C (739.4°F)

Decomposition temperature : Not applicable.

pH : Not applicable.

Viscosity : Kinematic (40°C): >20.5 mm^2/s

SECTION 9: Physical and chemical properties

Solubility(ies) :

Media	Result
cold water	Not soluble
hot water	Not soluble

Solubility in water : Not applicable.

Miscible with water : No.

Partition coefficient: n-octanol/water : Not applicable.

Vapour pressure : 24 kPa (180 mm Hg)

Evaporation rate : 6 (butyl acetate = 1)

Relative density : 0.959

Density : 0.959 g/cm³

Vapour density : 10 [Air = 1]

Explosive properties : Not available.

Oxidising properties : Not available.

Particle characteristics

Median particle size : Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.

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

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous 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
acetone	LC50 Inhalation Vapour	Rat	76 mg/l	4 hours
	LD50 Dermal	Rabbit	>15800 mg/kg	-
	LD50 Oral	Rat	5800 mg/kg	-
n-butyl acetate	LC50 Inhalation Gas.	Rat	390 ppm	4 hours
	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
	LD50 Dermal	Rabbit	>14112 mg/kg	-
	LD50 Oral	Rat	10760 mg/kg	-
4-chloro-α,α,α-trifluorotoluene	LD50 Oral	Rat	13 g/kg	-
heptan-2-one	LC50 Inhalation Vapour	Rat	16.8 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	1600 mg/kg	-
4-methylpentan-2-one	LC50 Inhalation Vapour	Rat	16.4 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-

SECTION 11: Toxicological information

	LD50 Oral	Rat	2080 mg/kg	-
2-methoxy-1-methylethyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	8532 mg/kg	-
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl) -5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropyl]-ω-hydroxy-	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl) -5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropoxy]-	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	>3230 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	4016 mg/kg	-
dioctyltin dilaurate	LD50 Oral	Rat	6450 mg/kg	-
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	LD50 Oral	Rat	>3230 mg/kg	-
2-butoxyethanol	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-
acetonitrile	LC50 Inhalation Gas.	Rat	17100 ppm	4 hours
	LD50 Dermal	Rabbit	980 mg/kg	-
	LD50 Oral	Rat	2460 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
8-114 Scratch Resistant Fast Repair Clear	12700.3	N/A	N/A	102.4	N/A
acetone	5800	N/A	N/A	76	N/A
n-butyl acetate	10760	N/A	N/A	N/A	N/A
4-chloro-α,α,α-trifluorotoluene	13000	N/A	N/A	N/A	N/A
heptan-2-one	1600	N/A	N/A	16.8	N/A
4-methylpentan-2-one	2080	N/A	N/A	11	N/A
2-methoxy-1-methylethyl acetate	8532	N/A	N/A	N/A	N/A
1-methoxy-2-propanol	4016	N/A	N/A	N/A	N/A
dioctyltin dilaurate	6450	N/A	N/A	N/A	N/A
2-butoxyethanol	1200	N/A	N/A	3	N/A
acetonitrile	500	980	17100	N/A	N/A

Irritation/Corrosion

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
acetone	Eyes - Mild irritant	Human	-	186300 ppm	-
	Eyes - Mild irritant	Rabbit	-	10 uL	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	395 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
n-butyl acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
heptan-2-one	Skin - Mild irritant	Rabbit	-	24 hours 14 mg	-
4-methylpentan-2-one	Eyes - Moderate irritant	Rabbit	-	24 hours 100 uL	-
	Eyes - Severe irritant	Rabbit	-	40 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
2-butoxyethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 uL	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

Conclusion/Summary : Not available.

Sensitisation

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
acetone	Category 3	-	Narcotic effects
n-butyl acetate	Category 3	-	Narcotic effects
4-methylpentan-2-one	Category 3	-	Narcotic effects
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
1-methoxy-2-propanol	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
dioctyltin dilaurate	Category 1	-	immune system

Aspiration hazard

Not available.

SECTION 11: Toxicological information

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact : May cause an allergic skin reaction.

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

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

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 effects

Not available.

Conclusion/Summary : Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

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

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
acetone	Acute EC50 20.565 mg/l Marine water	Algae - Green algae - *Ulva pertusa*	96 hours
	Acute LC50 4.42589 ml/L Marine water	Crustaceans - Calanoid copepod - *Acartia tonsa* - Copepodid	48 hours
	Acute LC50 10000 µg/l Fresh water	Daphnia - Water flea - *Daphnia magna*	48 hours
	Acute LC50 5540 mg/l	Fish - *Oncorhynchus mykiss*	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Green algae - *Ulva pertusa*	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphnia - *Daphniidae*	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Water flea - *Daphnia magna* - Neonate	21 days
	Chronic NOEC 5 µg/l Marine water	Fish - Threespine stickleback - *Gasterosteus aculeatus* - Larvae	42 days
n-butyl acetate	Acute EC50 397 mg/l	Algae - *Selenastrum capricornutum*	72 hours
	Acute EC50 44 mg/l	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 32 mg/l Marine water	Crustaceans - Brine shrimp - *Artemia salina*	48 hours
	Acute LC50 18 mg/l	Fish - *Pimephales promelas*	96 hours
	Acute NOEC 200 mg/l	Algae	72 hours
heptan-2-one	Acute LC50 131000 µg/l Fresh water	Fish - Fathead minnow - *Pimephales promelas*	96 hours
4-methylpentan-2-one	EC50 400 mg/l	Algae	96 hours
	EC50 >200 mg/l	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 505000 µg/l Fresh water	Fish - Fathead minnow - *Pimephales promelas*	96 hours
	Chronic NOEC 78 mg/l Fresh water	Daphnia - Water flea - *Daphnia magna*	21 days
	Chronic NOEC 168 mg/l Fresh water	Fish - Fathead minnow - *Pimephales promelas* - Embryo	33 days
2-methoxy-1-methylethyl acetate	Acute EC50 >1000 mg/l	Algae - *Pseudokirchnerella subcapitata*	96 hours
	Acute EC50 408 mg/l	Daphnia - Daphnia - *Daphnia magna*	48 hours
	Acute LC50 134 mg/l	Fish - *Oncorhynchus mykiss*	96 hours
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl) -5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropyl]-ω-hydroxy-	Acute LC50 2.8 mg/l	Fish	96 hours
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl) -5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropoxy]-	Acute LC50 2.8 mg/l	Fish	96 hours
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	Acute EC50 0.22 mg/l	Algae	72 hours
	Acute LC50 0.9 mg/l	Fish	96 hours
	Acute NOEC 6.3 mg/l	Daphnia	21 days
1-methoxy-2-propanol	Acute EC50 >1000 mg/l	Aquatic plants - *Selenastrum capricornutum*	96 hours
	Acute EC50 >21000 mg/l	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 6812 mg/l	Fish - *Leuciscus idus*	96 hours
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Acute EC50 0.22 mg/l	Algae	72 hours

SECTION 12: Ecological information

	Acute LC50 0.9 mg/l	Fish	96 hours
	Acute NOEC 6.3 mg/l	Daphnia	21 days
2-butoxyethanol	Acute EC50 911 mg/l	Algae - *Pseudokrichneriella subcapitata*	72 hours
	Acute EC50 1550 mg/l	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 800000 µg/l Marine water	Crustaceans - Common shrimp, sand shrimp - *Crangon crangon*	48 hours
	Acute LC50 1250 ppm Marine water	Fish - Inland silverside - *Menidia beryllina*	96 hours
	Chronic NOEC 100 mg/l	Daphnia - *Daphnia magna*	21 days
	Chronic NOEC >100 mg/l	Fish - *Brachydanio rerio*	21 days
acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - Duckweed - *Lemna minor*	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - Water flea - *Daphnia magna*	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Fathead minnow - *Pimephales promelas*	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - Duckweed - *Lemna minor*	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - Water flea - *Daphnia magna*	21 days

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
n-butyl acetate	OECD 301D Ready Biodegradability - Closed Bottle Test	>80 % - 5 days	-	-
heptan-2-one	-	69 % - Readily - 28 days	-	-
2-methoxy-1-methylethyl acetate	OECD 302B Inherent Biodegradability: Zahn-Wellens/ EMPA Test	100 % - 28 days	-	-
	OECD 301F Ready Biodegradability - Manometric Respirometry Test	83 % - 28 days	-	-
1-methoxy-2-propanol	OECD 301E 301E Ready Biodegradability - Modified OECD Screening Test	96 % - 28 days	-	-
2-butoxyethanol	-	90.4 % - Readily - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-butyl acetate	-	-	Readily
heptan-2-one	-	-	Readily
4-methylpentan-2-one	-	-	Readily
2-methoxy-1-methylethyl acetate	-	-	Readily
1-methoxy-2-propanol	-	-	Readily
2-butoxyethanol	-	-	Readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
acetone	-0.23	-	Low
n-butyl acetate	2.3	-	Low
heptan-2-one	2.26	-	Low
4-methylpentan-2-one	1.9	-	Low
2-methoxy-1-methylethyl acetate	1.2	-	Low
1-methoxy-2-propanol	<1	-	Low
dioctyltin dilaurate	-	<100	Low
2-butoxyethanol	0.81	-	Low
acetonitrile	-0.34	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

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

Product

Methods of disposal : The generation of waste should be avoided or minimised 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 : Yes.

Waste catalogue

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

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

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. Vapour 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	Paint
14.3 Transport hazard class(es)	3 	3 	3 	3 
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	No.	Yes.	No.	No.

Additional information

ADR/RID : **Hazard identification number** 33
Limited quantity 5 L
Special provisions 163, 640C, 650, 367
Tunnel code (D/E)

ADN : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.
Special provisions 163, 367, 640C, 650

IMDG : **Emergency schedules** F-E, _S-E_
Special provisions 163, 367

IATA : **Quantity limitation** Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353. Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y341.
Special provisions A3, A72, A192

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 according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

SECTION 15: Regulatory information

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P5c

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : At least one component is not listed.

Canada : At least one component is not listed.

China : At least one component is not listed.

Eurasian Economic Union : **Russian Federation inventory**: Not determined.

Japan : **Japan inventory (CSCL)**: At least one component is not listed.
Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted.

Philippines : At least one component is not listed.

Republic of Korea : All components are listed, exempted, or notified.

Taiwan : At least one component is not listed.

Thailand : Not determined.

Turkey : Not determined.

United States : All components are active or exempted.

Viet Nam : Not determined.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = GB 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

Classification	Justification
Flam. Liq. 2, H225	On basis of test data
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Carc. 2, H351	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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

Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Carc. 2	CARCINOGENICITY - Category 2
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1

SECTION 16: Other information

STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SUMI
Safe Use of Mixtures
Information for end-users

Title : Professional spray painting, near-industrial setting

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor spray painting by professionals with efficient ventilation such as spray booth or local exhaust ventilation

Operational conditions

Place of use : Indoor use

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation	
			Type	ach (air changes per hour)
Preparation of material for application	PROC05	1 to 4 hours	Enhanced (mechanical) room ventilation	5 - 10
Loading of application equipment and handling of coated parts before curing	PROC08a	15 minutes to 1 hour	Enhanced (mechanical) room ventilation	5 - 10
Professional application of coatings and inks by spraying	PROC11	1 to 4 hours	Local exhaust ventilation	Refer to relevant technical standards
Film formation - force drying, stoving and other technologies	PROC04	1 to 4 hours	Local exhaust ventilation	Refer to relevant technical standards
Cleaning	PROC05	1 to 4 hours	Enhanced (mechanical) room ventilation	5 - 10
Waste management	PROC08a	15 minutes to 1 hour	Enhanced (mechanical) room ventilation	5 - 10

Contributing activity	Process category (ies)	Respiratory	Eye	Hands
Preparation of material for application	PROC05	None	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.
Loading of application equipment and handling of coated parts before curing	PROC08a	None	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.
Professional application of coatings and inks by spraying	PROC11	Compressed-air breathing apparatus to EN 14594 with an assigned protection factor of at least 20.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.
Film formation - force drying, stoving and other technologies	PROC04	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	None	None
Cleaning	PROC05	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.
Waste management	PROC08a	Wear a respirator conforming to EN140 with	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in

		an assigned protection factor of at least 10.		combination with specific activity training.

See chapter 8 of this Safety Data Sheet for specifications.

Disclaimer

The information in this Safe Use of Mixture Information sheet is based on the data provided by the substance supplier for the substances in the product for which a chemical safety assessment has been carried out at the time of issue. It does not guarantee safe use of the product and does not replace any occupational risk assessment required by legislation. When developing workplace instructions for employees, SUMI sheets should always be considered in combination with the SDS and the label of the product.
No liability is accepted for any damage, no matter of what kind, which is direct or indirect consequence of acts and/or decisions (partly) based on the contents of this document.