Carsystem 2K CLEAR VOC CC.26 EcoX

Version	DE / EN	Revision Date:	Date of last issue: -
1.0		10.04.2026	Date of first issue: 10.04.2026

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

1.1 Product identifier

Trade name : Carsystem 2K CLEAR VOC CC.26 EcoX

Product code : 160.614

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

Use of the Substance/Mixture : Paints

Recommended restrictions on use : Industrial use, professional use

1.3 Details of the supplier of the safety data sheet

Company : Vosschemie GmbH
Esinger Steinweg 50
25436 Uetersen
Germany

info@vosschemie.de

Telephone : 04122 717 0
Telefax : 04122 717158

Organisation that prepared the SDS : Laboratory

04122 717 0
sds@vosschemie.de

1.4 Emergency telephone number

Telephone : Giftinformationszentrum (GIZ)-Nord, Göttingen, Deutschland
0551 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Warning

Hazard statements :

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements :

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing mist or vapours or spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

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

Disposal:

P501 Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Hazardous components which must be listed on the label:

n-butyl acetate
3-trimethoxysilylpropane-1-thiol
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
methyl 2-methylprop-2-enoate
2-hydroxyethyl methacrylate
dibutyltin dilaurate

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
n-butyl acetate	123-86-4 204-658-1 607-025-00-1 01-2119485493-29	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) EUH066	>= 25 - < 50
heptan-2-one	110-43-0 203-767-1 606-024-00-3 01-2119902391-49	Flam. Liq. 3; H226 Acute Tox. 4; H302 Acute Tox. 4; H332 STOT SE 3; H336 (Central nervous system) --- Acute toxicity estimate Acute oral toxicity: 1.500 mg/kg Acute inhalation toxicity (vapour): 11 mg/l	>= 2,5 - < 10

3-trimethoxysilylpropane-1-thiol	4420-74-0 224-588-5 01-2120763539-41	Acute Tox. 4; H302 Skin Sens. 1B; H317 Aquatic Chronic 2; H411 --- Acute toxicity esti-mate Acute oral toxicity: 500 mg/kg	>= 0,1 - < 2,5
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	1065336-91-5 915-687-0 01-2119491304-40	Skin Sens. 1A; H317 Repr. 2; H361f Aquatic Acute 1; H400 Aquatic Chronic 1; H410 --- M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 0,1 - < 1
propylidynetrimethanol	77-99-6 201-074-9 01-2119486799-10	Repr. 2; H361fd	>= 0,1 - < 1
methyl 2-methylprop-2-enoate	80-62-6 201-297-1 607-035-00-6 01-2119452498-28	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory system)	>= 0,1 - < 0,5
2-hydroxyethyl methacrylate	868-77-9 212-782-2 607-124-00-X 01-2119490169-29	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317	>= 0,1 - < 0,5
dibutyltin dilaurate	77-58-7 201-039-8 050-030-00-3 01-2119496068-27	Eye Irrit. 2; H319 Skin Sens. 1; H317 Muta. 2; H341 Repr. 1B; H360FD STOT SE 1; H370 STOT RE 1; H372 (Immune system) Aquatic Acute 1; H400 Aquatic Chronic 1; H410 --- M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 0,1 - < 0,3

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Move out of dangerous area. Take off contaminated clothing and shoes immediately.
Protection of first-aiders	:	First Aid responders should pay attention to self-protection and use the recommended protective clothing
If inhaled	:	Move to fresh air. Get medical attention. If breathing is irregular or stopped, administer artificial respiration. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	:	Wash off immediately with soap and plenty of water. Call a physician if irritation develops or persists.
In case of eye contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 5 minutes.
If swallowed	:	Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Risks	:	May cause an allergic skin reaction. May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Carbon dioxide (CO_2) Dry powder Water spray jet Alcohol-resistant foam
Unsuitable extinguishing media	:	High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting	:	Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

Hazardous combustion products	:	Hazardous decomposition products due to incomplete combustion Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

5.3 Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	:	Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Wear personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition.

6.2 Environmental precautions

Environmental precautions	:	Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Do not flush with water.

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Keep container closed when not in use. Provide sufficient air exchange and/or exhaust in work rooms.

Wear personal protective equipment.

Advice on protection against fire and explosion : Vapours may form explosive mixtures with air. Keep away from open flames, hot surfaces and sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

Further information on storage conditions : Keep away from heat and sources of ignition.

Advice on common storage : Keep away from food and drink.
Incompatible with oxidizing agents.

Storage class (TRGS 510) : 3

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
n-butyl acetate	123-86-4	STEL	150 ppm 723 mg/m3	2019/1831/EU
	Further information: Indicative			
		TWA	50 ppm 241 mg/m3	2019/1831/EU
	Further information: Indicative			
		MAK	100 ppm 480 mg/m3	DE DFG MAK
	Peak-limit: excursion factor (category): 2; I			
	Further information: Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed			
		AGW	62 ppm 300 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (category): 2;(I)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
ethyl 3-ethoxypropionate	763-69-9	AGW	100 ppm 610 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (category): 1;(I)			
	Further information: Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		MAK	100 ppm	DE DFG MAK

			610 mg/m3	
	Peak-limit: excursion factor (category): 1; I			
	Further information: Danger of absorption through the skin, Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed			
heptan-2-one	110-43-0	TWA	50 ppm 238 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	100 ppm 475 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		AGW	238 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (category): 2;(I)			
	Further information: Skin absorption			
methyl 2-methylprop-2-enoate	80-62-6	TWA	50 ppm	2009/161/EU
	Further information: Indicative			
		STEL	100 ppm	2009/161/EU
	Further information: Indicative			
		AGW	50 ppm 210 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (category): 2;(I)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		MAK	50 ppm 210 mg/m3	DE DFG MAK
	Peak-limit: excursion factor (category): 2; I			
	Further information: Danger of sensitization of the skin, Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed			
dibutyltin dilaurate	77-58-7	AGW (Vapour and aerosols)	0,0018 ppm 0,009 mg/m3 (Tin)	DE TRGS 900
	Peak-limit: excursion factor (category): 1;(I)			
	Further information: Skin absorption, When there is compliance with the OEL and biological tolerance values, harm to the unborn child can not be excluded			
		MAK	0,004 ppm 0,02 mg/m3 (Tin)	DE DFG MAK
	Peak-limit: excursion factor (category): 1; I			
	Further information: Substances that cause cancer in humans or animals or that are considered to be carcinogenic for humans and for which a MAK value can be derived., According to currently available information damage to the embryo or foetus cannot be excluded after exposure to concentrations at the level of the MAK and BAT values			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

Substance name	End Use	Exposure routes	Potential health effects	Value

n-butyl acetate	Workers	Inhalation	Long-term systemic effects, Long-term local effects	300 mg/m3
	Workers	Inhalation	Acute systemic effects	600 mg/m3
	Workers	Dermal	Long-term systemic effects, Acute systemic effects	11 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects, Long-term local effects	35,7 mg/m3
	Consumers	Inhalation	Acute systemic effects	300 mg/m3
	Consumers	Dermal	Long-term systemic effects, Acute systemic effects	6 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects, Acute systemic effects	2 mg/kg bw/day
heptan-2-one	Workers	Inhalation	Long-term systemic effects	394,25 mg/m3
	Workers	Dermal	Long-term systemic effects	54,27 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	84,31 mg/m3
	Consumers	Oral	Long-term systemic effects	23,32 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects	23,32 mg/kg bw/day
3-trimethoxysilylpropane-1-thiol	Workers	Inhalation	Long-term systemic effects	2,4 mg/m3
	Workers	Dermal	Long-term systemic effects	0,33 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0,58 mg/m3
	Consumers	Dermal	Long-term systemic effects	0,17 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	0,17 mg/kg bw/day
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Workers	Inhalation	Long-term systemic effects	0,68 mg/m3
	Workers	Dermal	Long-term systemic effects	0,5 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0,17 mg/m3
	Consumers	Dermal	Long-term systemic	0,25 mg/kg

			effects	bw/day
	Consumers	Oral	Long-term systemic effects	0,05 mg/kg bw/day
propylidynetrimetha-nol	Workers	Inhalation	Long-term systemic effects	3,3 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,94 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0,58 mg/m3
	Consumers	Skin contact, Oral	Long-term systemic effects	0,34 mg/kg bw/day
methyl 2-methylprop-2-enoate	Workers	Inhalation	Long-term systemic effects	348,4 mg/m3
	Workers	Skin contact	Long-term systemic effects	13,67 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	74,3 mg/m3
	Consumers	Inhalation	Long-term local effects	104 mg/m3
	Consumers	Skin contact	Long-term systemic effects	8,2 mg/kg bw/day
	Consumers	Skin contact	Acute local effects	1,5 mg/kg bw/day
	Consumers	Oral		8,2 mg/kg bw/day
2-hydroxyethyl meth-acrylate	Workers	Inhalation	Long-term systemic effects	4,9 mg/m3
	Workers	Skin contact	Long-term systemic effects	1,39 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	1,45 mg/m3
	Consumers	Skin contact	Long-term systemic effects	0,83 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	0,83 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value
n-butyl acetate	Fresh water	0,18 mg/l
	Marine water	0,018 mg/l
	Fresh water sediment	0,981 mg/kg dry weight (d.w.)
	Marine sediment	0,098 mg/kg dry weight (d.w.)
	Sewage treatment plant	35,6 mg/l
	Soil	0,09 mg/kg dry weight (d.w.)
heptan-2-one	Fresh water	0,098 mg/l
	Marine water	0,01 mg/l
	Fresh water sediment	1,89 mg/kg dry weight (d.w.)
	Marine sediment	0,189 mg/kg dry

		weight (d.w.)
	Sewage treatment plant	12,5 mg/l
	Soil	0,321 mg/kg dry weight (d.w.)
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Fresh water	0,002 mg/l
	Marine water	0,0002 mg/l
	Fresh water sediment	1,05 mg/kg dry weight (d.w.)
	Marine sediment	0,11 mg/kg dry weight (d.w.)
	Soil	0,21 mg/kg dry weight (d.w.)
	Sewage treatment plant	1 mg/l
methyl 2-methylprop-2-enoate	Fresh water	0,94 mg/l
	Marine water	0,094 mg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	10,2 mg/kg dry weight (d.w.)
	Marine sediment	1,02 mg/kg dry weight (d.w.)
	Soil	1,48 mg/kg dry weight (d.w.)
2-hydroxyethyl methacrylate	Fresh water	0,482 mg/l
	Marine water	0,048 mg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	3,79 mg/kg dry weight (d.w.)
	Marine sediment	3,79 mg/kg dry weight (d.w.)
	Soil	0,476 mg/kg dry weight (d.w.)

8.2 Exposure controls

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection

Material	:	butyl-rubber
Material	:	Nitrile rubber
Material	:	PVA
Break through time	:	> 480 min
Glove thickness	:	>= 0,7 mm
Guideline	:	DIN EN 374
Protective index	:	Class 6
Remarks	:	Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. The data

about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Preventive skin protection

Skin and body protection	:	Please wear suitable protective clothing, e.g. made of cotton or heat-resistant synthetic fibres. Long sleeved clothing
Respiratory protection	:	Apply technical measures to comply with the occupational exposure limits. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
Filter type	:	Combined particulates and organic vapour type (A-P)
Protective measures	:	Ensure that eye flushing systems and safety showers are located close to the working place. Avoid contact with the skin and the eyes. Use only with adequate ventilation.

Environmental exposure controls

Soil	:	Avoid subsoil penetration.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Form	:	liquid
Colour	:	colourless
Odour	:	characteristic
Melting point/freezing point	:	not determined
Initial boiling point and boiling range	:	124 - 128 °C
Upper explosion limit / Upper flammability limit	:	15 %(V)

Lower explosion limit / Lower flammability limit	:	1,2 %(V)
Flash point	:	> 23 °C
Auto-ignition temperature	:	not determined
pH	:	Not applicable substance/mixture is non-soluble (in water)
Viscosity		
Viscosity, dynamic	:	not determined
Viscosity, kinematic	:	not determined
Solubility(ies)		
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	not determined
Vapour pressure	:	10,7 hPa (20 °C)
Density	:	0,98 - 1 g/cm3 (20 °C)

9.2 Other information

Explosives	:	Not explosive In use, may form flammable/explosive vapour-air mixture.

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if used as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	Incompatible with strong acids and bases. Reaction with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Strong acids and strong bases
Strong oxidizing agents

10.6 Hazardous decomposition products

Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Components:

n-butyl acetate:

Acute oral toxicity : LD50 (Rat): 10.760 mg/kg
Method: OECD Test Guideline 423

Acute inhalation toxicity : LC50 (Rat, male and female): > 23,4 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 Dermal (Rabbit): > 14.112 mg/kg
Method: OECD Test Guideline 402

heptan-2-one:

Acute oral toxicity : LD50 (Rat): 1.500 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 16,7 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg

3-trimethoxysilylpropane-1-thiol:

Acute oral toxicity : LD50 Oral (Rat, female): 500 mg/kg
Method: OECD Test Guideline 423

Acute inhalation toxicity : LC50 (Rat): Exposure time: 6 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 Dermal (Rabbit, female): 2.172 mg/kg
Method: OECD Test Guideline 402

propylidynetrimethanol:

Acute oral toxicity : LD50 Oral (Rat): 14.700 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 0,85 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: No mortality observed at this dose.

Acute dermal toxicity : LD50 Dermal (Rabbit): > 10.000 mg/kg

methyl 2-methylprop-2-enoate:

Acute oral toxicity : LD50 Oral (Rat): ca. 7.900 mg/kg

Acute inhalation toxicity : LC50 (Rat): 29,8 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5.000 mg/kg
Method: OECD Test Guideline 402

2-hydroxyethyl methacrylate:

Acute oral toxicity : LD50 Oral (Rat): 5.564 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5.000 mg/kg

dibutyltin dilaurate:

Acute oral toxicity : LD50 Oral (Rat, male and female): 2.071 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 (Rat, male and female): > 2000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Components:

n-butyl acetate:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
Result	:	Repeated exposure may cause skin dryness or cracking.

methyl 2-methylprop-2-enoate:

Assessment	:	No skin irritation

Serious eye damage/eye irritation

Not classified due to lack of data.

Components:

n-butyl acetate:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	No eye irritation

methyl 2-methylprop-2-enoate:

Result	:	No eye irritation

dibutyltin dilaurate:

Result	:	Moderate eye irritation

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified due to lack of data.

Components:

n-butyl acetate:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.

3-trimethoxysilylpropane-1-thiol:

Result	:	The product is a skin sensitiser, sub-category 1B.

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Assessment : The product is a skin sensitiser, sub-category 1A.

methyl 2-methylprop-2-enoate:

Species : Mouse
Method : OECD Test Guideline 429
Result : May cause sensitisation by skin contact.

dibutyltin dilaurate:

Result : May cause sensitisation by skin contact.

Germ cell mutagenicity

Not classified due to lack of data.

Components:

n-butyl acetate:

Genotoxicity in vitro : Test Type: reverse mutation assay
Test system: Bacteria
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Method: OECD Test Guideline 474
Result: negative

Germ cell mutagenicity- Assessment : Animal testing did not show any mutagenic effects.

Carcinogenicity

Not classified due to lack of data.

Reproductive toxicity

Not classified due to lack of data.

Components:

n-butyl acetate:

Effects on fertility : Species: Rat, male and female
Dose: 2000 parts per million
Duration of Single Treatment: > 90 Days
Method: OECD Test Guideline 416
Result: No teratogenic effects

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Reproductive toxicity - Assessment	:	Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

propylidynetrimethanol:

Reproductive toxicity - Assessment	:	Suspected of damaging fertility. Suspected of damaging the unborn child.

STOT - single exposure

May cause drowsiness or dizziness.

Components:

n-butyl acetate:

Assessment	:	May cause drowsiness or dizziness.

heptan-2-one:

Assessment	:	May cause drowsiness or dizziness.

methyl 2-methylprop-2-enoate:

Exposure routes	:	Inhalation
Target Organs	:	Upper respiratory tract
Assessment	:	May cause respiratory irritation.

dibutyltin dilaurate:

Assessment	:	Causes damage to organs.

STOT - repeated exposure

Not classified due to lack of data.

Components:

n-butyl acetate:

Assessment	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

dibutyltin dilaurate:

Assessment	:	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

Not classified due to lack of data.

Components:

n-butyl acetate:

No aspiration toxicity classification

11.2 Information on other hazards

Endocrine disrupting properties

Not classified due to lack of data.

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Components:

n-butyl acetate:

Toxicity to fish : (Pimephales promelas (fathead minnow)): 18 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 44 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 647,7 mg/l
Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 23 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

heptan-2-one:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 131 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

3-trimethoxysilylpropane-1-thiol:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 345 mg/l
Exposure time: 96 h
Method: Regulation (EC) No. 440/2008, Annex, C.1

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 5,3 mg/l
Exposure time: 48 h

Method: Regulation (EC) No. 440/2008, Annex, C.2

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 732 mg/l
Exposure time: 72 h
Method: Regulation (EC) No. 440/2008, Annex, C.3

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 0,9 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

NOEC (Danio rerio (zebra fish)): 0,22 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 1,68 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1,0 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 1

propylidynetrimethanol:

Toxicity to fish : LC50 (Fish): > 1.000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 13.000 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l
Exposure time: 72 h

Toxicity to microorganisms : EC50 (Bacteria): > 1.000 mg/l
Exposure time: 3 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 1.000 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

methyl 2-methylprop-2-enoate:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 69 mg/l End point: Immobilization Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 110 mg/l End point: Growth rate Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 37 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

2-hydroxyethyl methacrylate:

Toxicity to fish	:	LC50 (Oryzias latipes (Orange-red killifish)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 380 mg/l End point: Immobilization Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 345 mg/l End point: Growth rate Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 24,1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

dibutyltin dilaurate:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 3,1 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 1,9 - 3,8 mg/l Exposure time: 48 h

Toxicity to algae/aquatic plants	:	EC50 (Scenedesmus subspicatus): > 1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	1
M-Factor (Chronic aquatic toxicity)	:	1

12.2 Persistence and degradability

Components:

n-butyl acetate:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 83 % Exposure time: 28 d Method: OECD Test Guideline 301D

heptan-2-one:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 100 % Method: OECD Test Guideline 310

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Biodegradability	:	Biodegradation: 38 % Exposure time: 28 d Method: OECD Test Guideline 301F

propylidynetrimethanol:

Biodegradability	:	Result: Not readily biodegradable.

methyl 2-methylprop-2-enoate:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 94 % Exposure time: 14 d Method: OECD Test Guideline 301C

2-hydroxyethyl methacrylate:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 98 % Exposure time: 21 d Method: OECD Test Guideline 301E

dibutyltin dilaurate:

Biodegradability	:	Result: Not readily biodegradable.

Biodegradation: 23 %
Exposure time: 39 d
Method: OECD Test Guideline 301F

12.3 Bioaccumulative potential

Components:

n-butyl acetate:

Bioaccumulation	:	Bioconcentration factor (BCF): 15,3 Remarks: Calculation No bioaccumulation is to be expected (log Pow <= 4).
Partition coefficient: n-octanol/water	:	log Pow: 2,3 (25 °C) Method: OECD Test Guideline 117

heptan-2-one:

Partition coefficient: n-octanol/water	:	log Pow: 2,26 (30 °C)

3-trimethoxysilylpropane-1-thiol:

Partition coefficient: n-octanol/water	:	log Pow: -0,82

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Bioaccumulation	:	Bioconcentration factor (BCF): < 9,7
Partition coefficient: n-octanol/water	:	log Pow: 2,37 - 2,77 (25 °C) pH: 7 Method: OECD Test Guideline 107

propylidynetrimethanol:

Partition coefficient: n-octanol/water	:	log Pow: -0,47 (26 °C)

methyl 2-methylprop-2-enoate:

Bioaccumulation	:	Species: Fish Bioconcentration factor (BCF): 2,97 Remarks: Calculation Information taken from reference works and the literature.
Partition coefficient: n-octanol/water	:	log Pow: 1,38

dibutyltin dilaurate:

Bioaccumulation	:	Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water	:	log Pow: 4,44 (20,8 °C)

12.4 Mobility in soil

Components:

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate:

Distribution among environmental compartments	:	log Koc: 5,31

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological information	:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Do not dispose of with domestic refuse. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Dispose of in accordance with local regulations. Send to a licensed waste management company.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. Store containers and offer for recycling of material when in accordance with the local regulations.

Packaging that is not properly emptied must be disposed of as the unused product.
Dispose of in accordance with local regulations.

Waste Code : The following Waste Codes are only suggestions:
08 01 11, waste paint and varnish containing organic solvents or other hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

ADN : UN 1263

ADR : UN 1263

RID : UN 1263

IMDG : UN 1263

IATA : UN 1263

14.2 UN proper shipping name

ADN : PAINT

ADR : PAINT

RID : PAINT

IMDG : PAINT

IATA : Paint

14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADN	3	
ADR	3	
RID	3	
IMDG	3	
IATA	3	

14.4 Packing group

ADN

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

ADR

Packing group : III
Classification Code : F1

Hazard Identification Number	:	30
Labels	:	3
Tunnel restriction code	:	(D/E)

RID

Packing group	:	III
Classification Code	:	F1
Hazard Identification Number	:	30
Labels	:	3

IMDG

Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-E

IATA (Cargo)

Packing instruction (cargo aircraft)	:	366
Packing instruction (LQ)	:	Y344
Packing group	:	III
Labels	:	Flammable Liquids

IATA (Passenger)

Packing instruction (passenger aircraft)	:	355
Packing instruction (LQ)	:	Y344
Packing group	:	III
Labels	:	Flammable Liquids

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3 Number on list 20: dibutyltin dilaurate Number on list 40 This substance/mixture shall not be used in aerosol dispensers intended for supply to the general public for entertainment and decorative purposes. Number on list 75 If you intend to use this product as tattoo ink, please contact your vendor.
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	P5c	FLAMMABLE LIQUIDS

Water hazard class (Germany)	:	WGK 2 obviously hazardous to water Classification according to AwSV, Annex 1 (5.2)
Volatile organic compounds	:	Directive 2004/42/EC Volatile organic compounds (VOC) content: < 420 g/l VOC content for the product in a ready to use condition. Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 66,5 %

Other regulations:

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical safety assessment

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product.

SECTION 16: Other information

Full text of H-Statements

H225	:	Highly flammable liquid and vapour.
H226	:	Flammable liquid and vapour.
H302	:	Harmful if swallowed.
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.
H341	:	Suspected of causing genetic defects.
H360FD	:	May damage fertility. May damage the unborn child.
H361f	:	Suspected of damaging fertility.
H361fd	:	Suspected of damaging fertility. Suspected of damaging the unborn child.
H370	:	Causes damage to organs.
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.
EUH066	:	Repeated exposure may cause skin dryness or cracking.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
Muta.	:	Germ cell mutagenicity
Repr.	:	Reproductive toxicity
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
2000/39/EC	:	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
2009/161/EU	:	Europe. COMMISSION DIRECTIVE 2009/161/EU establishing a third list of indicative occupational exposure limit values in

		implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
2019/1831/EU	:	Europe. Commission Directive 2019/1831/EU establishing a fifth list of indicative occupational exposure limit values
DE DFG MAK	:	Germany. MAK BAT Annex IIa
DE TRGS 900	:	Germany. TRGS 900 - Occupational exposure limit values.
2000/39/EC / TWA	:	Limit Value - eight hours
2000/39/EC / STEL	:	Short term exposure limit
2009/161/EU / TWA	:	Limit Value - eight hours
2009/161/EU / STEL	:	Short term exposure limit
2019/1831/EU / TWA	:	Limit Value - eight hours
2019/1831/EU / STEL	:	Short term exposure limit
DE DFG MAK / MAK	:	MAK value
DE TRGS 900 / AGW	:	Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:		**Classification procedure:**
Flam. Liq. 3	H226	Based on product data or assessment

Skin Sens. 1	H317	Calculation method
STOT SE 3	H336	Calculation method
Aquatic Chronic 3	H412	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN