SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

HELIOS REFINISH CLEARCOAT TINTER

Version	Revision Date:	SDS Number:	Date of last issue: 10.10.2025
2.0	25.02.2026	MAT0GA05_064IE/ EN	Date of first issue: 19.07.2023

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

1.1 Product identifier

Trade name : HELIOS REFINISH CLEARCOAT TINTER

Product code : 48158811

This substance/ mixture contains nanoforms (according to REACH Regulation)

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

Use of the Sub-stance/Mixture : PC9a: Coatings and paints, thinners, paint removers

Recommended restrictions on use : Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company : KANSAI HELIOS Slovenija d.o.o.
Količevo 65
1230 Domžale
Slovenia

Telephone Company : 386 (1) 722 4383

Telefax Company : 386 (1) 722 4310

Responsible/issuing person : 386 (1) 722 4383
productsafety@kansai-helios.si

1.4 Emergency telephone number

01 809 2166 National Poisons Information Centre 01 809 2166

01 809 2566 Healtcare Professionals 01 809 2566

01 809 2566 Healtcare Professionals 01 809 2566

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 irritation, Category 2	H315: Causes skin irritation.

Eye irritation, Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
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.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe mist or vapours.
P264	Wash skin thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Hazardous components which must be listed on the label:

reaction mixture of ethylbenzene, m-xylene and p-xylene
n-butyl acetate

2-methoxy-1-methylethyl acetate

Additional Labelling

EUH208 Contains mixture of benzotriazole, mixture of sterically composed sebacates. May produce an allergic reaction.

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)
reaction mixture of ethylbenzene, m-xylene and p-xylene	- 905-562-9 01-2119555267-33, 01-2119488216-32	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system) STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; H412	>= 30 - < 50
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	>= 20 - < 30
2-methoxy-1-methylethyl acetate	108-65-6 203-603-9 607-195-00-7 01-2119475791-29	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system)	>= 1 - < 10
reaction mass of α-3-(3-(2H-	104810-48-2	Skin Sens. 1; H317	>= 0.25 - < 1

benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxy-phe-nyl)propionyloxypoly(oxyethylene)	400-830-7 607-176-00-3 01-0000015075-76	Aquatic Chronic 2; H411	
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. 1; H317 Repr. 2; H361f Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0.25 - < 1

This substance/ mixture contains nanoforms (according to REACH Regulation)

Components:

5,12-dihydroquino[2,3-b]acridine-7,14-dione:

Particle characteristics

Particle Size Distribution	:	D10 = 0.023 µm ± 0.013 µm D50 = 0.033 µm ± 0.018 µm D90 = 0.048 µm ± 0.028 µm
Specific surface area	:	100 M2G ± 30 M2G Measurement technique: Brunauer, Emmett and Teller (BET) method using Nitrogen
Assessment	:	This substance/ mixture contains nanoforms (according to REACH Regulation) Total Content of Nanomaterials: 90 - 100 %
Shape	:	Shape: cubes Fraction (Weight): 40 - 100 % Measurement technique: TEM Shape: spheres Fraction (Weight): 0 - 50 % Measurement technique: TEM
Crystallinity	:	Crystallinity: crystalline Measurement technique: X-ray Diffraction (XRD)
Surface treatment /Coatings	:	Surface treatment /Coatings: no

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.

In case of skin contact : If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

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 : Alcohol-resistant foam

Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : 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.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
Advice on protection against fire and explosion	:	Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfaces and sources of ignition.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Further information on storage stability	:	No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s)	:	For further information, refer to the product technical data sheet. Consult the technical guidelines for the use of this substance/mixture.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
reaction mixture of ethylbenzene, m-xylene and p-xylene	1330-20-7	OELV - 8 hrs (TWA)	50 ppm 221 mg/m3	IE OEL
	Further information: Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body			
		OELV - 15 min (STEL)	100 ppm 442 mg/m3	IE OEL
	Further information: Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body			
		TWA	50 ppm 221 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	100 ppm 442 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
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			
		OELV - 8 hrs (TWA)	50 ppm 241 mg/m3	IE OEL
		OELV - 15 min (STEL)	150 ppm 723 mg/m3	IE OEL
2-methoxy-1-methylethyl acetate	108-65-6	STEL	100 ppm 550 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	50 ppm 275 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		OELV - 8 hrs (TWA)	50 ppm 275 mg/m3	IE OEL
	Further information: Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body			
		OELV - 15 min (STEL)	100 ppm 550 mg/m3	IE OEL

	Further information: Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body

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

Substance name	End Use	Exposure routes	Potential health effects	Value
reaction mixture of ethylbenzene, m-xylene and p-xylene	Workers	Inhalation	Long-term systemic effects	77 mg/m3
	Consumers	Inhalation	Long-term local effects	65.3 mg/m3
	Workers	Inhalation	Acute systemic effects	442 mg/m3
	Workers	Inhalation	Acute local effects	289 mg/m3
	Consumers	Inhalation	Acute systemic effects	260 mg/m3
	Workers	Inhalation	Long-term local effects	221 mg/m3
	Consumers	Inhalation	Long-term systemic effects	14.8 mg/m3
	Consumers	Inhalation	Acute local effects	260 mg/m3
	Consumers	Dermal	Long-term systemic effects	108 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	16 mg/kg bw/day
	Workers	Dermal	Long-term systemic effects	180 mg/kg bw/day
n-butyl acetate	Workers	Inhalation	Acute systemic effects	600 mg/m3
	Workers	Inhalation	Acute local effects	600 mg/m3
	Workers	Inhalation	Long-term systemic effects	48 mg/m3
	Workers	Inhalation	Long-term local effects	300 mg/m3
	Consumers	Inhalation	Acute systemic effects	300 mg/m3
	Consumers	Inhalation	Acute local effects	300 mg/m3
	Consumers	Inhalation	Long-term systemic effects	12 mg/m3
	Consumers	Inhalation	Long-term local effects	35.7 mg/m3
	Consumers	Dermal	Long-term systemic effects	3.4 mg/kg bw/day
	Consumers	Dermal	Acute systemic effects	6 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	2 mg/kg bw/day
	Consumers	Oral	Acute systemic effects	2 mg/kg bw/day
	Workers	Dermal	Long-term systemic effects	7 mg/kg bw/day

	Workers	Dermal	Acute systemic effects	11 mg/kg bw/day
5,12-dihydroquino[2,3-b]acridine-7,14-dione	Workers	Dermal	Long-term systemic effects	42 mg/m3
	Workers	Inhalation	Long-term systemic effects	147 mg/m3
	Consumers	Dermal	Long-term systemic effects	25 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	25 mg/kg bw/day
2-methoxy-1-methylethyl acetate	Workers	Inhalation	Long-term systemic effects	275 mg/m3
	Workers	Inhalation	Acute local effects	550 mg/m3
	Consumers	Inhalation	Long-term systemic effects	33 mg/m3
	Consumers	Inhalation	Long-term local effects	33 mg/m3
	Workers	Dermal	Long-term systemic effects	796 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects	320 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	36 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
reaction mixture of ethylbenzene, m-xylene and p-xylene	Soil	2.31 mg/kg dry weight (d.w.)
	Marine water	0.327 mg/l
	Fresh water	0.327 mg/l
	Marine sediment	12.46 mg/kg dry weight (d.w.)
	Fresh water sediment	12.46 mg/kg dry weight (d.w.)
	Sewage treatment plant	6.58 mg/l
	Intermittent use/release	0.327 mg/l
n-butyl acetate	Soil	0.0903 mg/kg dry weight (d.w.)
	Marine water	0.018 mg/l
	Fresh water	0.18 mg/l
	Marine sediment	0.0981 mg/kg dry weight (d.w.)
	Fresh water sediment	0.981 mg/kg dry weight (d.w.)
	Sewage treatment plant	35.6 mg/l
	Intermittent use/release	0.36 mg/l
2-methoxy-1-methylethyl acetate	Soil	0.29 mg/kg dry weight (d.w.)
	Marine water	0.0635 mg/l
	Fresh water	0.635 mg/l

	Marine sediment	0.329 mg/kg dry weight (d.w.)
	Fresh water sediment	3.29 mg/kg dry weight (d.w.)
	Sewage treatment plant	100 mg/l
	Intermittent use/release	0.00635 mg/l

8.2 Exposure controls

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

Eye/face protection : Equipment should conform to EN 166
Eye wash bottle with pure water
Tightly fitting safety goggles

Hand protection

Gloves : Viton® (> 0,6 mm; < 240 min); ISO EN374
PE laminate (> 0,1 mm; < 240 min); ISO EN374

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Equipment should conform to EN 14387

Filter type : Organic vapour type (A)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid

Form : liquid

Colour : in accordance with the product description

Odour	:	solvent-like
Odour Threshold	:	No data available
Melting point/freezing point	:	-78.0 °C (calculation method (principal components, lowest value))
Boiling point/boiling range	:	126 °C (calculation method (principal components, lowest value))
Flammability	:	Static-accumulating flammable liquid., Combustible Solids
Upper explosion limit / Upper flammability limit	:	7.5 %(V) (calculation method (principal components, highest value))
Lower explosion limit / Lower flammability limit	:	1.1 %(V) (calculation method (principal components, highest value))
Flash point	:	25 °C
Ignition temperature	:	425 °C (calculation method (principal components, highest value))
Decomposition temperature	:	No decomposition if stored and applied as directed. Hazardous decomposition products formed under fire conditions.
pH	:	Not applicable
Viscosity		
Viscosity, kinematic	:	> 20.5 mm2/s (40 °C)
Solubility(ies)		
Water solubility	:	immiscible, partly soluble
Solubility in other solvents	:	Description: miscible with most organic solvents
Partition coefficient: n-octanol/water	:	log Pow: 2.77 - 3.15 (calculation method (principal components, highest value))

Vapour pressure	:	< 1,100 hPa (calculation method (principal components, highest value)) (50 °C)
Relative density	:	No data available
Density	:	0.96 - 1.14 g/cm3
Relative vapour density	:	No data available
Particle characteristics		
Assessment	:	This substance/ mixture contains nanoforms (according to REACH Regulation)
Particle size	:	Further particle properties for nanomaterials see section 3

9.2 Other information

Explosives	:	Not applicable
Oxidizing properties	:	Sustains combustion
VOC	:	(Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control)) 63.5 %

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	No decomposition if stored and applied as directed. Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid	:	Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Incompatible with strong acids and bases.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

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

Acute toxicity

Not classified based on available information.
Not classified due to lack of data.

Product:

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

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:

reaction mixture of ethylbenzene, m-xylene and p-xylene:

Acute oral toxicity : LD50 Oral (Rat): >= 8,700 mg/kg

Acute inhalation toxicity : LC50 (Rat): 27.14 mg/l
Test atmosphere: vapour

Acute dermal toxicity : Assessment: The component/mixture is moderately toxic after single contact with skin.

n-butyl acetate:

Acute oral toxicity : LD50 Oral (Rat): >= 10,760 mg/kg

Acute dermal toxicity : LD50 (Rabbit): >= 5,000 mg/kg

2-methoxy-1-methylethyl acetate:

Acute oral toxicity : LD50 Oral (Rat): > > 2,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l
Test atmosphere: vapour

LC0 (Rat): 2000 ppm
Exposure time: 3 h

Acute dermal toxicity : LD50 (Rabbit): > > 2,000 mg/kg

Skin corrosion/irritation

Causes skin irritation.
Causes skin irritation.

Product:

Remarks : May cause skin irritation and/or dermatitis.

Components:

reaction mixture of ethylbenzene, m-xylene and p-xylene:

Result : irritating

Serious eye damage/eye irritation

Causes serious eye irritation.
Causes serious eye irritation.

Product:

Remarks : Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

reaction mixture of ethylbenzene, m-xylene and p-xylene:

Result : Eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified due to lack of data.

Product:

Remarks : Causes sensitisation.

Components:

mixture of benzotriazole:

Result : Probability or evidence of skin sensitisation in humans

mixture of sterically composed sebacates:

Result : May cause sensitisation by skin contact.

Germ cell mutagenicity

Not classified based on available information.
Not classified due to lack of data.

Carcinogenicity

Not classified based on available information.
Not classified due to lack of data.

Reproductive toxicity

Not classified based on available information.
Not classified due to lack of data.

Components:

mixture of sterically composed sebacates:

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

STOT - single exposure

May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause respiratory irritation.
May cause drowsiness or dizziness.

Components:

reaction mixture of ethylbenzene, m-xylene and p-xylene:

Assessment : May cause respiratory irritation.

n-butyl acetate:

Assessment : May cause drowsiness or dizziness.

2-methoxy-1-methylethyl acetate:

Assessment : May cause drowsiness or dizziness.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.
May cause damage to organs through prolonged or repeated exposure.

Components:

reaction mixture of ethylbenzene, m-xylene and p-xylene:

Assessment : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Not classified based on available information.
Not classified due to lack of data.

Components:

reaction mixture of ethylbenzene, m-xylene and p-xylene:

May be fatal if swallowed and enters airways.

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.

Further information

Product:

Remarks	:	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

SECTION 12: Ecological information

12.1 Toxicity

Components:

reaction mixture of ethylbenzene, m-xylene and p-xylene:

Toxicity to fish	:	LC50 (Fish): >= 1 - 10 mg/l
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia (water flea)): >= 1 - 10 mg/l
Toxicity to microorganisms	:	EC50 (Bacteria): >= 1 - 100 mg/l

Ecotoxicology Assessment

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

n-butyl acetate:

Toxicity to algae/aquatic plants	:	NOEC (Desmodesmus subspicatus (green algae)): > 200 mg/l EC50 (Desmodesmus subspicatus (green algae)): >= 647.7 mg/l Exposure time: 72 h
Toxicity to microorganisms	:	IC50 (Tetrahymena pyriformis): 356 mg/l Exposure time: 40 h

2-methoxy-1-methylethyl acetate:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 130 mg/l Exposure time: 96 h NOEC : 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	LC50 : 408 mg/l Exposure time: 48 h
Toxicity to fish (Chronic toxicity)	:	EC10: 47.5 mg/l

mixture of benzotriazole:

Ecotoxicology Assessment

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

mixture of sterically composed sebacates:

Ecotoxicology Assessment

Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Components:

reaction mixture of ethylbenzene, m-xylene and p-xylene:

Biodegradability	:	Readily biodegradable.
Photodegradation	:	Decomposes rapidly in contact with light.

n-butyl acetate:

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

Stability in water	:	Degradation half life: 78 d pH: 8 Hydrolyses slowly.
Photodegradation	:	Decomposes rapidly in contact with light.

2-methoxy-1-methylethyl acetate:

Biodegradability	:	Readily biodegradable.

12.3 Bioaccumulative potential

Components:

reaction mixture of ethylbenzene, m-xylene and p-xylene:

Bioaccumulation	:	Bioconcentration factor (BCF): 25.9 Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	log Pow: 2.77 - 3.15

n-butyl acetate:

Bioaccumulation	:	Bioconcentration factor (BCF): 15 Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	log Pow: 1.81

2-methoxy-1-methylethyl acetate:

Partition coefficient: n-octanol/water	:	log Pow: 1.2 (20 °C) pH: 6.8

mixture of sterically composed sebacates:

Partition coefficient: n-octanol/water	:	log Pow: 2.37 - 2.77 pH: 7

12.4 Mobility in soil

Components:

reaction mixture of ethylbenzene, m-xylene and p-xylene:

Distribution among environmental compartments	:	Koc: 537, log Koc: 2.73 Moderately mobile in soils The product evaporates from soil.
Stability in soil	:	Dissipation time: 23 d Percentage dissipation: 50 % (DT50)

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 : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

Waste Code : 08 00 00, WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00, wastes from MFSU and removal of paint and varnish
08 01 11, waste paint and varnish containing organic solvents or other hazardous substances
15 00 00, WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE

CLOTHING NOT OTHERWISE SPECIFIED
15 01 00, packaging (including separately collected municipal packaging waste)
15 01 10, packaging containing residues of or contaminated by hazardous substances
HP3, Flammable
HP4, Irritant - skin irritation and eye damage
HP5, Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

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 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
Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	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

Volatile organic compounds	:	Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 63.5 %

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

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 is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H226	:	Flammable liquid and vapour.
H304	:	May be fatal if swallowed and enters airways.
H312	:	Harmful in contact with skin.
H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H319	:	Causes serious eye irritation.
H332	:	Harmful if inhaled.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H361f	:	Suspected of damaging fertility.
H373	:	May cause 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 other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
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
2019/1831/EU	:	Europe. Commission Directive 2019/1831/EU establishing a fifth list of indicative occupational exposure limit values
IE OEL	:	Ireland. List of Chemical Agents and Carcinogens with Occupational Exposure Limit Values - Code of Practice, Schedule 1 and 2
2000/39/EC / TWA	:	Limit Value - eight hours

2000/39/EC / STEL	:	Short term exposure limit
2019/1831/EU / TWA	:	Limit Value - eight hours
2019/1831/EU / STEL	:	Short term exposure limit
IE OEL / OELV - 8 hrs (TWA)	:	Occupational exposure limit value (8-hour reference period)
IE OEL / OELV - 15 min (STEL)	:	Occupational exposure limit value (15-minute reference period)

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 Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
STOT SE 3	H336	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 2	H373	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.