SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

TESSAROL enamel for tin plated sheet metal

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	20.01.2021	MAT0GA00_023 GB / EN	Date of first issue: 20.01.2021

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

1.1 Product identifier

Product code	:	Please see section 16 for detailed data
Trade name	:	TESSAROL enamel for tin plated sheet metal
Unique Formula Identifier (UFI)	:	MH30-C0T0-K00R-YRSV

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

Use of the Substance/Mixture	:	SU19 Building and construction work Professional and consumer use of coatings, Roller application or brushing, Non industrial spraying PC9a Coatings and paints, thinners, paint removers

1.3 Details of the supplier of the safety data sheet

Company	:	Helios TBLUS d.o.o. Količevo 65 1230 Domžale Slovenia
Telephone Company	:	00386 1 722 4383
Telefax Company	:	1 722 4310
Responsible/issuing person	:	00386 1 722 4383 productsafety@helios.si

1.4 Emergency telephone number

Call 999 for emergency medical attention

professionals only: National Poison Information Service (NPIS) 24h national number 0844 892 0111

consumer: National Health Service (NHS) 24h national number, England & Scotland 111

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.
Specific target organ toxicity - single exposure, Category 3, Central nervous	H336: May cause drowsiness or dizziness.

system

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.
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 :
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271 Use only outdoors or in a well-ventilated area.

Response:

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

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

n-butyl acetate
hydrocarbons, C9 aromatics
1-methoxy-2-propanol

Additional Labelling

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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	>= 20 - < 30
titanium dioxide	13463-67-7 236-675-5 01-2119489379-17	Carc. 2; H351	>= 10 - < 20
hydrocarbons, C9 aromatics	- 01-2119455851-35	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) STOT SE 3; H335 (Respiratory system) Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 10 - < 20
1-methoxy-2-propanol	107-98-2 203-539-1 603-064-00-3 01-2119457435-35	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system)	>= 1 - < 10
Substances with a workplace exposure limit :			
Talc	14807-96-6 238-877-9 01-2120140278-58		>= 1 - < 10

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.

4.2 Most important symptoms and effects, both acute and delayed

Risks	:	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	:	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	:	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. 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.

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 : 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.

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	TWA	150 ppm 724 mg/m3	GB EH40
		STEL	200 ppm 966 mg/m3	GB EH40
		STEL	150 ppm 723 mg/m3	2019/1831/EU
	Further information: Indicative			
		TWA	50 ppm 241 mg/m3	2019/1831/EU
	Further information: Indicative			
titanium dioxide	13463-67-7	TWA (inhalable dust)	10 mg/m3	GB EH40
		TWA (Respirable dust)	4 mg/m3	GB EH40
Talc	14807-96-6	TWA (Respirable dust)	1 mg/m3	GB EH40
		TWA (Respirable	0,1 mg/m3	2004/37/EC

		dust)		
	Further information: Carcinogens or mutagens			
Calcium carbonate	471-34-1	TWA (inhalable dust)	10 mg/m3	GB EH40
		TWA (Respirable dust)	4 mg/m3	GB EH40
1-methoxy-2-propanol	107-98-2	TWA	100 ppm 375 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	150 ppm 568 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	100 ppm 375 mg/m3	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	150 ppm 560 mg/m3	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			

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	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
titanium dioxide	Workers	Inhalation	Long-term local effects	10 mg/m3
	Consumers	Oral	Long-term systemic effects	700 mg/kg bw/day
hydrocarbons, C9 aromatics	Workers	Inhalation	Long-term systemic effects	150 mg/m3
	Workers	Oral	Long-term systemic effects	150 mg/m3
	Consumers	Inhalation	Long-term exposure	32 mg/m3
	Workers	Dermal	Long-term systemic effects	25 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects	11 mg/kg bw/day
Talc	Workers	Inhalation	Acute systemic effects	2,16 mg/m3
	Workers	Inhalation	Acute local effects	3,6 mg/m3
	Consumers	Inhalation	Acute systemic effects	1,08 mg/m3
	Consumers	Inhalation	Acute local effects	1,8 mg/m3
	Consumers	Dermal	Long-term local effects	2,27 mg/cm2
	Workers	Dermal	Long-term local effects	4,54 mg/cm2
	Consumers	Oral	Long-term systemic effects	160 mg/kg bw/day
	Consumers	Oral	Acute systemic effects	160 mg/kg bw/day
	Workers	Dermal	Long-term systemic effects	43,2 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects	21,6 mg/kg bw/day
Calcium carbonate	Workers	Inhalation	Long-term local effects	4,26 mg/m3
	Consumers	Inhalation	Long-term local effects	1,06 mg/m3
1-methoxy-2-propanol	Workers	Inhalation	Long-term systemic effects	369 mg/m3
	Workers	Inhalation	Acute systemic effects	553,5 mg/m3
	Workers	Inhalation	Acute local effects	553,5 mg/m3
	Workers	Inhalation	Long-term systemic effects	43,9 mg/m3
	Workers	Dermal	Long-term systemic effects	183 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects	78 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	33 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
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
titanium dioxide	Soil	100 mg/kg dry weight (d.w.)
	Marine water	0,0184 mg/l
	Fresh water	0,184 mg/l
	Marine sediment	100 mg/kg dry weight (d.w.)
	Fresh water sediment	1000 mg/kg dry weight (d.w.)
	Sewage treatment plant	100 mg/l
	Intermittent use/release	0,193 mg/l
Talc	Marine water	141,26 mg/l
	Fresh water	597,97 mg/l
	Marine sediment	3,13 mg/kg dry weight (d.w.)
	Fresh water sediment	31,33 mg/kg dry weight (d.w.)
	Intermittent use/release	597,97 mg/l
Calcium carbonate	Sewage treatment plant	100 mg/l
1-methoxy-2-propanol	Soil	4,59 mg/kg dry weight (d.w.)
	Marine water	1 mg/l
	Fresh water	10 mg/l
	Marine sediment	5,2 mg/kg dry weight (d.w.)
	Fresh water sediment	52,3 mg/kg dry weight (d.w.)
	Sewage treatment plant	100 mg/l
	Intermittent use/release	100 mg/l
sulfonic acids, C10-21-alkane, phenyl esters	Soil	27,1 mg/kg dry weight (d.w.)

8.2 Exposure controls

Personal protective equipment

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

Hand protection
Directive : Equipment should conform to EN 374

Material : Viton®

Rate of permeability	:	> 480 min
Protective index	:	Class 6
Material	:	PVA
Rate of permeability	:	> 480 min
Protective index	:	Class 6
Glove thickness	:	> 0,5 mm
Remarks	:	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. The obtained break through times according to EN 374 Part III are not measured under normal operating conditions. Therefore a maximum usage time of 50% of the break through time is recommended. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Nitrile gloves are not suitable. Take note of the information given by the producer concerning permeability, degradation and break through times, and of special work
Skin and body protection	:	Long sleeved clothing Safety shoes
Respiratory protection	:	No personal respiratory protective equipment normally required.
Protective measures	:	Wash thoroughly after handling. Avoid contact with skin, eyes and clothing. Keep away from food, drink and animal feedingstuffs.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	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	:	1,2 %(V) (calculation method (principal components, highest value))
Flash point	:	29 °C (calculation method (principal components, lowest value))
Ignition temperature	:	425 °C (calculation method (principal components, highest value))
Decomposition temperature		
Decomposition temperature	:	No decomposition if stored and applied as directed. Hazardous decomposition products formed under fire conditions.
pH	:	No data available
Viscosity		
Viscosity, kinematic	:	> 20,5 mm2/s (40 °C)
Flow time	:	> 60 s at 23 °C Cross section: 6 mm Method: ISO 2431
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	Description: miscible with most organic solvents
Partition coefficient: n-octanol/water	:	log Pow: < 4 (calculation method (principal components, highest value))
Vapour pressure	:	13 hPa (calculation method (principal components, highest value))
Density	:	1,10 - 1,25 g/cm3 Method: ISO 2811

9.2 Other information

Explosives	:	Not applicable
Oxidizing properties	:	Sustains combustion

VOC	:	(Directive 2004/42/EC) 500 g/l

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 : Strong oxidizing agents

10.6 Hazardous decomposition products

Adequate ventilation is required.
Heating can release vapours which can be ignited.
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 based on available information.

Components:

n-butyl acetate:

Acute oral toxicity : LD50 Oral (Rat): >= 10.760 mg/kg

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

hydrocarbons, C9 aromatics:

Acute dermal toxicity : LD50 (Rabbit): > 3.160 mg/kg

1-methoxy-2-propanol:

Acute oral toxicity : LD50 Oral (Rabbit): > 2.000 mg/kg

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

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause drowsiness or dizziness.

Components:

n-butyl acetate:

Assessment : May cause drowsiness or dizziness.

hydrocarbons, C9 aromatics:

Assessment : May cause drowsiness or dizziness.

Assessment : May cause respiratory irritation.

1-methoxy-2-propanol:

Assessment : May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Components:

hydrocarbons, C9 aromatics:

May be fatal if swallowed and enters airways.

11.2 Information on other hazards

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.

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:

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

hydrocarbons, C9 aromatics:

Toxicity to fish : LC50 (Fish): >= 9,2 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): >= 3,2 mg/l
Exposure time: 48 h

Ecotoxicology Assessment

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

1-methoxy-2-propanol:

Toxicity to fish : LC50 (Fish): > 1.000 mg/l

		Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia (water flea)): > 1.000 mg/l
Toxicity to algae/aquatic plants	:	LC50 (algae): > 1.000 mg/l

12.2 Persistence and degradability

Components:

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.

12.3 Bioaccumulative potential

Components:

n-butyl acetate:

Bioaccumulation	:	Bioconcentration factor (BCF): 15 Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	log Pow: 1,81

hydrocarbons, C9 aromatics:

Partition coefficient: n-octanol/water	:	log Pow: < 4

1-methoxy-2-propanol:

Partition coefficient: n-octanol/water	:	log Pow: -0,437

12.4 Mobility in soil

Components:

hydrocarbons, C9 aromatics:

Mobility	:	Medium: Air Content: 92,9 %

	:	Medium: Water Content: 3,5 %
	:	Medium: Soil Content: 1,9 %
	:	Medium: Sediment Content: 1,8 %
Distribution among environmental compartments	:	Koc: 1,71 - 14,70 Mobile in soils The product is insoluble and floats on water.

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	:	Dispose of as hazardous waste in compliance with local and national regulations.
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 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)

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

Remarks	:	ADR: Packages smaller than or equal to 450 litres, not goods/merchandise of Class 3 (exemption ADR 2.2.3.1.5) IMDG: Packages smaller than or equal to 450 litres, not goods/merchandise of Class 3

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, preparations and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	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 2004/42/EC Volatile organic compounds (VOC) content: 500 g/l

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection 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.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H351	:	Suspected of causing cancer if inhaled.
H411	:	Toxic to aquatic life with long lasting effects.
EUH066	:	Repeated exposure may cause skin dryness or cracking.

Full text of other abbreviations

Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Carc.	:	Carcinogenicity
Flam. Liq.	:	Flammable liquids
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

2004/37/EC	:	Europe. Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work
2019/1831/EU	:	Europe. Commission Directive 2019/1831/EU establishing a fifth list of indicative occupational exposure limit values
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
2000/39/EC / TWA	:	Limit Value - eight hours
2000/39/EC / STEL	:	Short term exposure limit
2004/37/EC / TWA	:	Long term exposure limit
2019/1831/EU / TWA	:	Limit Value - eight hours
2019/1831/EU / STEL	:	Short term exposure limit
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European 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 Harmonized 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 Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; 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 - Organization 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; 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
STOT SE 3	H336	Calculation method
Aquatic Chronic 3	H412	Calculation method

Material codes (bulk) for which the SDS is valid	477873;477874;477875;477876;477877;477878;477879;477880;

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.