SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

EVO-STIK TX528 ADHESIVE
Supercedes Date: 30-Jan-2020

Revision Date: 21-Oct-2020
Revision Number 1.07

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

1.1. Product Identifier

Product Name EVO-STIK TX528 ADHESIVE
Pure substance/mixture Mixture

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

Recommended use Adhesive.
Uses advised against None known

1.3. Details of the supplier of the safety data sheet

Company Name
Bostik Limited
Common Rd
ST16 3EH
Stafford UK
Tel: +44 (1785) 27 26 25
Fax: +44 (1785) 25 72 36

E-mail address SDS.box-EU@bostik.com

1.4. Emergency telephone number

United Kingdom +44 (1785) 272650
Ireland +353 (1) 8624900 (Monday- Friday 9am-5pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 3 - (H336)
Chronic aquatic toxicity	Category 2 - (H411)
Flammable liquids	Category 2 - (H225)

2.2. Label Elements

Contains: Ethyl acetate, Methyl ethyl ketone, Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics, Hydrocarbons, C6, isoalkanes, <5% n-hexane

Signal word
DANGER

Hazard statements

H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.
H225 - Highly flammable liquid and vapour.

EU Specific Hazard Statements
EUH208 - Contains rosin & methylols. May produce an allergic reaction.

Precautionary statements
P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
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.
P273 - Avoid release to the environment.
P280 - Wear protective gloves and eye/face protection.
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391 - Collect spillage.
P403 + P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/ container to an approved waste disposal plant.

Additional information
This product requires tactile warnings if supplied to the general public.

2.3. Other Hazards

In use may form flammable/explosive vapour-air mixture

PBT & vPvB
This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	REACH Registration Number
Ethyl acetate	205-500-4	141-78-6	15 - 25	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225) (EUH066)		01-2119475103-46-XXXX
Methyl ethyl ketone	201-159-0	78-93-3	15 - 25	Eye Irrit. 2 (H319) (EUH066) STOT SE 3 (H336) Flam. Liq. 2 (H225)		01-2119457290-43-XXXX

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	927-510-4	64742-49-0	10 - <20	STOT SE 3 (H336) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Aquatic Chronic 2 (H411) Flam. Liq. 2 (H225)		01-2119475515-33-xxxx
Hydrocarbons, C6, isoalkanes, <5% n-hexane	931-254-9	64742-49-0	5 - <10	STOT SE 3 (H336) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Aquatic Chronic 2 (H411) Flam Liq. 2 (H225) (EUH066)		01-2119484651-34-XXXX
Xylenes (o-, m-, p-isomers)	215-535-7	1330-20-7	5 - <10	STOT SE 3 (H335) STOT RE 2 (H373) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Flam Liq. 3 (H226) Aquatic Chronic 3 (H412)		01-2119488216-32-XXXX
Ethylbenzene	202-849-4	100-41-4	1- <2.5	STOT RE 2 (H373) Asp. Tox. 1 (H304) Acute Tox. 4 (H332) Flam Liq. 2 (H225) Aquatic Chronic 3 (H412)		01-2119489370-35-XXXX
Rosin	232-475-7	8050-09-7	0.1 - <1	Skin Sens. 1 (H317)		01-2119480418-32-XXXX
N,N'-Ethylenebis(12-hydroxyoctadecanamide)	204-613-6	123-26-2	0.1 - <1	Skin Sens. 1 (H317) Aquatic Chronic 3 (H412)		01-2119978265-26-XXXX
Methylols	-	UNKNOWN	0.1 - <1	Skin Sens. 1 (H317)		--

Full text of H- and EUH-phrases: see section 16

Note: ^ indicates not classified, however, the substance is listed in section 3 as it has an OEL

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur. Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

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

Symptoms May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

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

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media Full water jet. Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products Carbon dioxide (CO2). Hydrogen chloride.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

Prevention of secondary hazards Eliminate all ignition sources if safe to do so.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Take off contaminated clothing and wash it before reuse. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapours or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights,

electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific Use(s)
Adhesive.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

Other information Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Ireland	United Kingdom
Ethyl acetate 141-78-6	-	TWA: 734 mg/m³ TWA: 200 ppm STEL: 1468 mg/m³ STEL: 400 ppm	TWA: 734 mg/m³ TWA: 200 ppm STEL: 1468 mg/m³ STEL: 400 ppm
Methyl ethyl ketone 78-93-3	TWA: 200 ppm TWA: 600 mg/m³ STEL: 300 ppm STEL: 900 mg/m³	TWA: 200 ppm TWA: 600 mg/m³ STEL: 300 ppm STEL: 900 mg/m³ Sk*	TWA: 200 ppm TWA: 600 mg/m³ STEL: 300 ppm STEL: 899 mg/m³ Sk*
Xylenes (o-, m-, p- isomers) 1330-20-7	TWA: 50 ppm TWA: 221 mg/m³ STEL: 100 ppm STEL: 442 mg/m³ *	TWA: 50 ppm TWA: 221 mg/m³ STEL: 100 ppm STEL: 442 mg/m³ Sk*	TWA: 50 ppm TWA: 220 mg/m³ STEL: 100 ppm STEL: 441 mg/m³ Sk*
Ethylbenzene 100-41-4	TWA: 100 ppm TWA: 442 mg/m³ STEL: 200 ppm STEL: 884 mg/m³ *	TWA: 100 ppm TWA: 442 mg/m³ STEL: 200 ppm STEL: 884 mg/m³ Sk*	TWA: 100 ppm TWA: 441 mg/m³ STEL: 125 ppm STEL: 552 mg/m³ Sk*
Rosin 8050-09-7	-	TWA: 0.05 mg/m³ STEL: 0.15 mg/m³	TWA: 0.05 mg/m³ STEL: 0.15 mg/m³
Magnesium oxide (MgO) 1309-48-4	-	TWA: 4 mg/m³ TWA: 5 mg/m³ TWA: 10 mg/m³ STEL: 10 mg/m³ STEL: 12 mg/m³ STEL: 30 mg/m³	TWA: 10 mg/m³ TWA: 4 mg/m³ STEL: 30 mg/m³ STEL: 12 mg/m³
Isopropyl alcohol 67-63-0	-	TWA: 200 ppm STEL: 400 ppm Sk*	TWA: 400 ppm TWA: 999 mg/m³ STEL: 500 ppm STEL: 1250 mg/m³
Talc 14807-96-6	-	TWA: 10 mg/m³ TWA: 0.8 mg/m³ STEL: 30 mg/m³ STEL: 2.4 mg/m³	TWA: 1 mg/m³ STEL: 3 mg/m³

Chemical name	European Union	Ireland	United Kingdom
Methyl ethyl ketone 78-93-3	-	-	70 µmol/L urine
Xylenes (o-, m-, p- isomers) 1330-20-7	-	-	650 mmol/mol creatinine urine

Derived No Effect Level (DNEL) No information available

Derived No Effect Level (DNEL)			
Ethyl acetate (141-78-6)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Systemic health effects	Dermal	63 mg/kg bw/d	
worker Short term Systemic health effects	Inhalation	1468 mg/m³	
worker Long term Local health effects	Inhalation	734 mg/m³	
worker Short term Local health effects	Inhalation	1468 mg/m³	
worker Long term Systemic health effects	Inhalation	734 mg/m³	

Methyl ethyl ketone (78-93-3)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Systemic health effects	Dermal	1161 mg/kg bw/d	
worker Long term Systemic health effects	Inhalation	600 mg/m³	

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Systemic health effects	Inhalation	2085 mg/m³	
worker Long term Systemic health effects	Dermal	300 mg/kg bw/d	

Xylenes (o-, m-, p- isomers) (1330-20-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Long term Systemic health effects worker	Dermal	180 mg/kg bw/d	
Long term Systemic health effects worker	Inhalation	77 mg/m³	
Short term Local health effects Systemic health effects worker	Inhalation	289 mg/m³	

Rosin (8050-09-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Local health effects	Inhalation	10 mg/m³	

worker Long term Systemic health effects	Dermal	2131 mg/kg bw/d	

Derived No Effect Level (DNEL)			
Ethyl acetate (141-78-6)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Long term Systemic health effects	Oral	4.5 mg/kg bw/d	
Consumer Long term Systemic health effects	Dermal	37 mg/kg bw/d	
Consumer Short term Systemic health effects	Inhalation	734 mg/m³	
Consumer Long term Local health effects	Inhalation	367 mg/m³	
Consumer Short term Local health effects	Inhalation	734 mg/m³	
Consumer Long term Systemic health effects	Inhalation	367 mg/m³	

Methyl ethyl ketone (78-93-3)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Long term Systemic health effects	Dermal	412 mg/kg bw/d	
Consumer Long term Systemic health effects	Inhalation	106 mg/m³	
Consumer Local health effects Systemic health effects	Oral	31 mg/kg bw/d	

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Long term Systemic health effects	Inhalation	447 mg/m³	
Consumer Long term Systemic health effects	Dermal	149 mg/kg bw/d	
Consumer Long term Systemic health effects	Oral	149 mg/kg bw/d	

Rosin (8050-09-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Long term Systemic health effects	Dermal	1065 mg/kg bw/d	
Consumer	Oral	1065 mg/kg bw/d	

Long term Systemic health effects			

Predicted No Effect Concentration (PNEC) No information available.

Predicted No Effect Concentration (PNEC)	
Ethyl acetate (141-78-6)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	0.26 mg/l
Marine water	0.026 mg/l
Freshwater sediment	1.25 mg/kg
Marine sediment	0.125 mg/kg
Soil	0.24 mg/kg
Microorganisms in sewage treatment	650 mg/l

Methyl ethyl ketone (78-93-3)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	55.8 mg/l
Marine water	55.8 mg/l
Freshwater sediment	287.74 mg/l
Marine sediment	287.7 mg/l
Soil	22.5 mg/l

Rosin (8050-09-7)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	0.002 mg/l
Marine water	0 mg/l
Sewage treatment plant	1000 mg/l
Freshwater sediment	0.007 mg/l
Marine sediment	0.001 mg/l

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas. Vapours/aerosols must be exhausted directly at the point of origin.

Personal Protective Equipment

Eye/face protection Tight sealing safety goggles. Face protection shield. Eye protection must conform to standard EN 166.

Hand protection Wear protective gloves. Gloves must conform to standard EN 374. The breakthrough time of the gloves depends on the material and the thickness as well as the temperature. Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Skin and body protection Antistatic footwear. Wear fire/flame resistant/retardant clothing. Suitable protective clothing.

Respiratory protection In case of inadequate ventilation wear respiratory protection. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Recommended filter type: Organic gases and vapours filter conforming to EN 14387.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance Liquid
Colour Light yellow
Odour No information available
Odour threshold No information available

Property	Values	Remarks • Method
pH	No data available	
Melting point / freezing point	No data available	
Boiling point / boiling range	66 °C	
Flash point	-20 °C	
Evaporation rate	No data available	
Flammability (solid, gas)	Not applicable for liquids .	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapour pressure	No data available	
Vapour density	No data available	
Relative density	0.84 -	None known
Water solubility	Insoluble in water	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	500 mm²/s	@ 40°C None known
Dynamic viscosity	No data available	
Explosive properties	No data available	
Oxidising properties	No data available	

9.2. Other information

Solid content (%)	No information available	
VOC Content (%)	approx. 655 g/L	Directive 2004/42/EC on the limitation of emissions of volatile organic compounds
Density	No information available	

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact	None.
Sensitivity to static discharge	Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition None under normal use conditions. Stable under recommended storage conditions.

products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information .

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness or dizziness.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact Causes skin irritation. (based on components). Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (dermal) 15,116.70 mg/kg
ATEmix (inhalation-dust/mist) 21.807 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl acetate 141-78-6	=5620 mg/kg (Rattus)	> 18000 mg/kg (Oryctolagus cuniculus) > 20 mL/kg (Oryctolagus cuniculus)	LC0 29.3 mg/l air
Methyl ethyl ketone 78-93-3	=2483 mg/kg (Rattus)	= 5000 mg/kg (Oryctolagus cuniculus)	=11700 ppm (Rattus) 4 h
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	LD50 >5840 mg/kg Rat	LD50 >2920 mg/kg (Rattus)	LC50 >23.3 mg/L (4h)(Rat, vapour) (OECD 403)
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	>16750 mg/Kg (Rattus)	>3350 mg/Kg (Oryctolagus cuniculus) OECD 402	259354 mg/m³ (vapour) (rat OECD 403)
Xylenes (o-, m-, p- isomers) 1330-20-7	=3500 mg/kg (Rattus)	> 1700 mg/kg (Oryctolagus cuniculus) > 4350 mg/kg (Oryctolagus cuniculus)	=>47635 mg/L (Rattus) 4 h = >5000 ppm (Rattus) 4 h
Ethylbenzene 100-41-4	=3500 mg/kg (Rattus)	= 15400 mg/kg (Oryctolagus cuniculus)	=17.4 mg/L (Rattus) 4 h
Rosin 8050-09-7	>2000 mg/Kg (Rattus)	> 2500 mg/kg (Oryctolagus cuniculus)	=1.5 mg/L (Rattus) 4 h
N,N'-Ethylenebis(12-hydroxyoctadecanamide)	>2000 mg/Kg (Rattus)		

123-26-2			

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

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.

Chemical name	European Union
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	Muta. 1B
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	Muta. 1B

Carcinogenicity Based on available data, the classification criteria are not met.

Chemical name	**European Union**
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	Carc. 1B
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	Carc. 1B

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure May cause drowsiness or dizziness.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Toxic to aquatic life with long lasting effects. Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	M-Factor	M-Factor (long-term)
Ethyl acetate 141-78-6	EC50: =3300mg/L (48h, Desmodesmus subspicatus)	LC50: =484mg/L (96h, Oncorhynchus mykiss) LC50: 352 - 500mg/L (96h,	EC50 = 1180 mg/L 5 min EC50 = 1500 mg/L 15 min EC50 = 5870 mg/L 15 min	EC50: =560mg/L (48h, Daphnia magna)		

		Oncorhynchus mykiss) LC50: 220 - 250mg/L (96h, Pimephales promelas)	EC50 = 7400 mg/L 2 h			
Methyl ethyl ketone 78-93-3	EC50=1972 mg/l (Pseudokirchneriella subcapitata)	LC50: 3130 - 3320mg/L (96h, Pimephales promelas)	EC50 = 3403 mg/L 30 min EC50 = 3426 mg/L 5 min	EC50 48 h > 308 mg/L (Daphnia magna)		
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	ErL50 (72h) = 10-30 mg/L (Pseudokirchneriella subcapitata)	LL50 (96h) >13.4 mg/L (Oncorhynchus mykiss) OECD 203	-	EL50 (48h) = 3.0 mg/L (Daphnia magna)		
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	EL50 (72h) = 13.6 mg/l (Pseudokirchneriella subcapitata)	LL50 (96h) = 18.27 mg/l (Oncorhynchus mykiss)	-	EL50 (48h)= 31.9 mg/l (Daphnia magna)		
Xylenes (o-, m-, p-isomers) 1330-20-7	-	LC50 96 h 2.6 mg/L (Oncorhynchus mykiss) (OECD 203)	EC50 = 0.0084 mg/L 24 h	EC50 48 h = 3.4 mg/L (Dappnia magna)		
Ethylbenzene 100-41-4	EC50 72 h 2.6 - 11.3 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h = 4.2 mg/L (Oncorhynchus mykiss semi-static)	EC50 = 9.68 mg/L 30 min EC50 = 96 mg/L 24 h	EC50: 1.8 - 2.4mg/L (48h, Daphnia magna)		
Rosin 8050-09-7	EC50: =400mg/L (72h, Desmodesmus subspicatus)	LC50 (96h) >10mg/L (Danio rerio)	EC50 = 31.5 mg/L 30 min	EC50 48 h >100 mg/L (Daphnia magna)		

12.2. Persistence and degradability

Persistence and degradability No information available.

Component Information			
Methyl ethyl ketone (78-93-3)			
Method	**Exposure time**	**Value**	**Results**
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)	28 days	biodegradation	98 % Readily biodegradable

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)			
Method	**Exposure time**	**Value**	**Results**
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F)	28 days	98%	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
Ethyl acetate	0.6	30

141-78-6		
Methyl ethyl ketone 78-93-3	0.3	-
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	3.6	501
Xylenes (o-, m-, p- isomers) 1330-20-7	3.15	15
Ethylbenzene 100-41-4	3.2	15

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The components in this formulation do not meet the criteria for classification as PBT or vPvB. .

Chemical name	PBT and vPvB assessment
Ethyl acetate 141-78-6	The substance is not PBT / vPvB PBT assessment does not apply
Methyl ethyl ketone 78-93-3	The substance is not PBT / vPvB
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 64742-49-0	The substance is not PBT / vPvB
Hydrocarbons, C6, isoalkanes, <5% n-hexane 64742-49-0	The substance is not PBT / vPvB
Xylenes (o-, m-, p- isomers) 1330-20-7	The substance is not PBT / vPvB
Ethylbenzene 100-41-4	The substance is not PBT / vPvB
Rosin 8050-09-7	The substance is not PBT / vPvB Further information relevant for the PBT assessment is necessary
N,N'-Ethylenebis(12-hydroxyoctadecanamide) 123-26-2	The substance is not PBT / vPvB

12.6. Other adverse effects

Other adverse effects No information available.

.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

European Waste Catalogue 08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances
15 01 10*: Packaging containing residues of or contaminated by dangerous substances

Other information Waste codes should be assigned by the user based on the application for which the

product was used.

SECTION 14: Transport information

Note: The information shown here, may not always agree with the bill of lading shipping description for the material. The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments made in non-bulk packages (see regulatory definition).

Land transport (ADR/RID)

14.1 UN number	UN1133
14.2 Proper Shipping Name	Adhesives, Environmentally Hazardous
14.3 Transport hazard class(es)	3
Labels	3
14.4 Packing group	II
Description	UN1133, Adhesives, 3, II, (D/E), Environmentally Hazardous
14.5 Environmental hazards	Yes
14.6 Special Provisions	640D
Classification code	F1
Tunnel restriction code	(D/E)
Limited Quantity (LQ)	5 L
ADR Hazard Id (Kemmler Number)	33

IMDG

14.1 UN number	UN1133
14.2 Proper Shipping Name	Adhesives (Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics), Marine Pollutant
14.3 Transport hazard class(es)	3
14.4 Packing group	II
Description	UN1133, Adhesives (Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics), 3, II, (-20°C c.c.), Marine Pollutant
14.5 Marine pollutant	P.
14.6 Special Provisions	None
Limited Quantity (LQ)	5 L
EmS-No	F-E, S-D

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

Air transport (ICAO-TI / IATA-DGR)

14.1 UN number	UN1133
14.2 Proper Shipping Name	Adhesives
14.3 Transport hazard class(es)	3
14.4 Packing group	II
Description	UN1133, Adhesives, 3, II
14.5 Environmental hazards	Yes
14.6 Special Provisions	A3
Limited Quantity (LQ)	1 L
ERG Code	3L

Section 15: REGULATORY INFORMATION

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Check whether measures in accordance with Directive 94/33/EC for the protection of young people at work must be taken.

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

Registration, Evaluation, Authorization, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006)

SVHC: Substances of Very High Concern for Authorisation:
This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction
This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Chemical name	CAS No	Restricted substance per REACH Annex XVII
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	64742-49-0	28. 29.
Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-0	28. 29.

Substance subject to authorisation per REACH Annex XIV
This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

Dangerous substance category per Seveso Directive (2012/18/EU)

P5a - FLAMMABLE LIQUIDS
P5b - FLAMMABLE LIQUIDS
P5c - FLAMMABLE LIQUIDS
E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable

Persistent Organic Pollutants
Not applicable

National regulations

15.2. Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa. No Chemical Safety Assessment has been carried out for this mixture

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
EUH066 - Repeated exposure may cause skin dryness or cracking
H225 - Highly flammable liquid and vapour
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

H373 - May cause damage to organs through prolonged or repeated exposure
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

Legend

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value
*	Skin designation
SVHC	Substance(s) of Very High Concern
PBT	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
vPvB	Very Persistent and very Bioaccumulative (vPvB) Chemicals
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
EWC	European Waste Catalogue

Key literature references and sources for data
No information available

Prepared By Product Safety & Regulatory Affairs

Revision Date: 21-Oct-2020

Indication of changes

Revision note Not applicable.

Training Advice Provide adequate information, instruction, and training for operator

Further information No information available

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
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.

End of Safety Data Sheet