



SAFETY DATA SHEET

540/V621 - TEAMALAK YACHT VARNISH

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name 540/V621 - TEAMALAK YACHT VARNISH

Product number 540/V621/10

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

Identified uses Paint.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier TEAL & MACKRILL LIMITED
LOCKWOOD STREET
HULL
HU2 0HN
+44(0)1482 320194(T)
+44(0)1482 219266(F)
info@teamac.co.uk

Contact person Technical Department -, 08.30 - 16.30 hrs Mon - Thurs, 08.30 - 15.00 hrs Fri, as above

1.4. Emergency telephone number

Emergency telephone +44 (0) 1482 320194 Teamac (08.30 - 16.30 hrs Mon - Thurs, 08.30 - 15.00 hrs Fri)

SDS No. 10610

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards Skin Sens. 1 - H317 STOT SE 3 - H336

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word

Warning

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Hazard statements	H226 Flammable liquid and vapour. H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P102 Keep out of reach of children. P101 If medical advice is needed, have product container or label at hand. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe vapour/ spray. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.
Contains	HYDROCARBONS, C9-C11, <2% AROMATICS, Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
Supplementary precautionary statements	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

HYDROCARBONS, C9-C11, <2% AROMATICS		30-60%
CAS number: —	EC number: 919-857-5	REACH registration number: 01-2119463258-33-XXXX
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226	Xn;R65. R10,R66,R67.	
STOT SE 3 - H336		
Asp. Tox. 1 - H304		
Mixture of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates		1-5%
CAS number: 127519-17-9	EC number: 407-000-3	REACH registration number: 01-2120113105-76-0000
Classification		
Aquatic Chronic 2 - H411		

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Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate			1-5%
CAS number: —	EC number: 915-687-0	REACH registration number: 01-2119491304-40-0000	
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification			
Skin Sens. 1A - H317			
Aquatic Acute 1 - H400			
Aquatic Chronic 1 - H410			
2-METHYLPENTANE-2,4-DIOL			<1%
CAS number: 107-41-5	EC number: 203-489-0		
Classification		Classification (67/548/EEC or 1999/45/EC)	
Skin Irrit. 2 - H315		Xi;R36/38	
Eye Irrit. 2 - H319			
Calcium Carbonate			<1%
CAS number: 1317-65-3	EC number: 215-279-6		
Classification		Classification (67/548/EEC or 1999/45/EC)	
Not Classified		-	
Strontium bis(2-ethylhexanoate)			<1%
CAS number: 2457-02-5	EC number: 219-536-3	REACH registration number: 01-2120783571-49-0001	
Classification			
Acute Tox. 4 - H302			
Skin Irrit. 2 - H315			
Eye Dam. 1 - H318			
Repr. 2 - H361			
Dipropylene Glycol Methyl Ether			<1%
CAS number: 34590-94-8	EC number: 252-104-2	REACH registration number: 01-2119450011-60-XXXX	
Classification		Classification (67/548/EEC or 1999/45/EC)	
Not Classified		-	

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2,6-Di-tert-butyl-p-cresol <1%		
CAS number: 128-37-0	EC number: 204-881-4	REACH registration number: 01-2119565113-46-xxxx
M factor (Acute) = 1		
Classification		Classification (67/548/EEC or 1999/45/EC)
Aquatic Acute 1 - H400		N;R50/53.
Aquatic Chronic 1 - H410		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments The product contains organic solvents.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin contact	Rinse with water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system. During application and drying, solvent vapours will be emitted. Vapours in high concentrations are narcotic.
Ingestion	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	Prolonged contact may cause dryness of the skin. Discoloration of the skin.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

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5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards FLAMMABLE. Solvent vapours may form explosive mixtures with air. Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment.
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.
7.2. Conditions for safe storage, including any incompatibilities	
Storage precautions	Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.
Storage class	Flammable liquid storage.
7.3. Specific end use(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
Usage description	Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

2-METHYLPENTANE-2,4-DIOL

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m³

Short-term exposure limit (15-minute): WEL 25 ppm 123 mg/m³

Calcium Carbonate

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Dipropylene Glycol Methyl Ether

Long-term exposure limit (8-hour TWA): WEL 50 ppm 308 mg/m³

Sk

2,6-Di-tert-butyl-p-cresol

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

HYDROCARBONS, C9-C11, <2% AROMATICS

DNEL

Industry - Inhalation; Long term systemic effects: 1500 mg/m³

Consumer - Oral; Long term systemic effects: 300 mg/kg/day

Consumer - Dermal; Long term systemic effects: 300 mg/kg/day

Industry - Dermal; Long term systemic effects: 300 mg/kg/day

Consumer - Inhalation; Long term systemic effects: 900 mg/m³

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PNEC No PNEC available. Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for the risk assessment of this complex substance.

Mixture of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates (CAS: 127519-17-9)

DNEL Workers - Inhalation; Long term systemic effects: 0.35 mg/m³
 Workers - Dermal; Long term systemic effects: 0.5 mg/kg/day
 General population - Inhalation; Long term systemic effects: 0.085 mg/m³
 General population - Dermal; Long term systemic effects: 0.25 mg/kg/day
 General population - Oral; Long term systemic effects: 0.025 mg/kg/day

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

DNEL Workers - Inhalation; Long term systemic effects: 3.53 mg/m³
 Workers - Dermal; Long term systemic effects: 2 mg/kg/day
 General population - Inhalation; Long term systemic effects: 0.87 mg/m³
 General population - Dermal; Long term systemic effects: 1 mg/kg/day
 General population - Oral; Long term systemic effects: 0.5 mg/kg/day

Reaction mass of Diethylene glycol dibenzoate, Dipropylene glycol dibenzoate and Trithethylene glycol dibenzoate

DNEL Workers - Dermal; Short term systemic effects: 160 mg/kg
 Workers - Inhalation; Short term systemic effects: 35.08 mg/m³
 Workers - Dermal; Long term systemic effects: 1.7 mg/kg
 Workers - Inhalation; Long term systemic effects: 5.8 mg/m³
 General population - Dermal; Short term systemic effects: 8 mg/kg
 General population - Inhalation; Short term systemic effects: 8.7 mg/m³
 General population - Oral; Short term systemic effects: 80 mg/kg
 General population - Dermal; Long term systemic effects: 0.8 mg/kg
 General population - Inhalation; Long term systemic effects: 1.4 mg/m³
 General population - Oral; Long term systemic effects: 0.8 mg/kg

PNEC - Fresh water; 0.0029 mg/l
 - marine water; 0.00029 mg/l
 - Intermittent release; 0.029 mg/l
 - Sediment (Freshwater); 0.0263 mg/kg
 - Sediment (Marinewater); 0.0263 mg/kg
 - Soil; 1 mg/kg
 - STP; 10 mg/l
 - ;

Dipropylene Glycol Methyl Ether (CAS: 34590-94-8)

DNEL Industry - Dermal; Long term : 65 mg/kg/day
 Industry - Inhalation; Long term : 310 mg/m³
 Consumer - Dermal; Long term : 15 mg/kg/day
 Consumer - Inhalation; Long term : 37.2 mg/m³
 Consumer - Oral; Long term : 1.67 mg/kg/day

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PNEC	Fresh water; 19 mg/l
	marine water; 1.9 mg/l
	STP; 4168 mg/l
	Sediment (Freshwater); 70.2 mg/kg
	Sediment (Marinewater); 7.02 mg/kg
	Soil; 2.74 mg/kg
	Intermittent release; 19 mg/l

2,6-Di-tert-butyl-p-cresol (CAS: 128-37-0)

DNEL	Industry - Dermal; : 0.5 mg/kg/day
	Industry - Inhalation; : 3.5 mg/kg/day
PNEC	- Fresh water; 0.000199 mg/l
	- Sediment; 0.0996 mg/l
	- marine water; 0.0000199 mg/l
	- Soil; 0.04769 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

To protect hands from chemicals, gloves should comply with European Standards EN388 and 374. As a general principle, exposure should be managed by means other than the provision of protective gloves. Manufacturer's performance data suggest that the optimum glove for use should be: Wear protective gloves made of the following material: Nitrile rubber. Thickness: \geq 0.31 mm Permeation breakthrough time according to EN374 - class: (1-6) e.g. minimum 480 mins. Caution: The performance of gloves under actual working conditions can be significantly affected by many factors and the information provided according to EN374 may not accord with what is achieved in practice. We recommend that expert professional advice is sought that takes into account of the work processes and working environment applicable for each task where gloves are to be worn.

Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures

Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

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Respiratory protection	Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Wear a respirator fitted with the following cartridge: Gas filter, type A2.
Environmental exposure controls	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid. Clear, yellowish liquid.
Colour	Straw.
Odour	Organic solvents.
Odour threshold	Not determined.
pH	Technically not feasible.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	38 approx. °C Closed cup.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Upper/lower flammability or explosive limits	: 0.8
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	heavier than air
Relative density	0.92 @ @ 20°C
Solubility(ies)	Insoluble in water
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	2.5 (Rotoinner) P @ 25°C
Explosive properties	Not determined.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not determined.

9.2. Other information

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Volatility 51

Volatile organic compound This product contains a maximum VOC content of 395 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity See the other subsections of this section for further details.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react strongly with the product: Oxidising agents.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Static electricity and formation of sparks must be prevented.

10.5. Incompatible materials

Materials to avoid Oxidising materials. Acids - oxidising.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects There is no data available on the mixture itself. The mixture has been assessed following the EC 1272/2008 regulation and classified for toxicological hazards accordingly. See Sections 2 and 3 for details.

Skin sensitisation

Skin sensitisation May cause skin sensitisation or allergic reactions in sensitive individuals.

Carcinogenicity

IARC carcinogenicity None of the ingredients are listed or exempt.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 3 - H336 May cause drowsiness or dizziness.

Target organs Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure STOT RE 1 - H372

Inhalation

Prolonged inhalation of high concentrations may damage respiratory system. During application and drying, solvent vapours will be emitted. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea.

Ingestion

Symptoms following overexposure may include the following: Nausea, vomiting. Diarrhoea.

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Skin contact	The product contains organic solvents. May be absorbed through the skin. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.
Eye contact	May cause temporary eye irritation.
Medical considerations	Skin disorders and allergies. Avoid vomiting and stomach flushing because of the risk of aspiration.

Toxicological information on ingredients.

HYDROCARBONS, C9-C11, <2% AROMATICS

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,100.0

Species Rat

ATE oral (mg/kg) 5,100.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,100.0

Species Rabbit

ATE dermal (mg/kg) 5,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 5,100.0

Species Rat

ATE inhalation (vapours mg/l) 5,100.0

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative. This substance has no evidence of mutagenic properties.

Carcinogenicity

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

Reproductive toxicity

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Reproductive toxicity - fertility	Fertility: - , Inhalation, Rat This substance has no evidence of toxicity to reproduction.
Reproductive toxicity - development	Developmental toxicity: - : , Inhalation, Rat This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not available.

Aspiration hazard

Aspiration hazard Kinematic viscosity <= 20.5 mm²/s.

Inhalation	Vapours may cause drowsiness and dizziness. Central nervous system depression.
Ingestion	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
Skin contact	Product has a defatting effect on skin. May cause allergic contact eczema.
Eye contact	No specific health hazards known.
Route of exposure	Inhalation Dermal

Mixture of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,100.0

Species Rat

ATE oral (mg/kg) 2,100.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,100.0

Species Rat

ATE dermal (mg/kg) 2,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 5.8

Species Rat

ATE inhalation (dusts/mists mg/l) 5.8

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,230.0

Species Rat

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ATE oral (mg/kg) 3,230.0

Acute toxicity - dermalAcute toxicity dermal (LD₅₀ 3,170.0 mg/kg)

Species Rat

ATE dermal (mg/kg) 3,170.0

2-METHYLPENTANE-2,4-DIOL**Acute toxicity - oral**Acute toxicity oral (LD₅₀ 3,700.0 mg/kg)

Species Rat

ATE oral (mg/kg) 3,700.0

Acute toxicity - dermalAcute toxicity dermal (LD₅₀ 8,560.0 mg/kg)

Species Rabbit

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

Animal data Moderately irritating.

SECTION 12: Ecological information

Ecotoxicity There is no data available on the mixture itself. The mixture has been assessed following the EC 1272/2008 regulation and classified for toxicological hazards accordingly.

12.1. Toxicity

Toxicity Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.

Ecological information on ingredients.**HYDROCARBONS, C9-C11, <2% AROMATICS****Acute aquatic toxicity**

Acute toxicity - fish LC50, > 96 hours: 1000 mg/l, Oncorhynchus mykiss (Rainbow trout)
Substance did not cause acute toxicity to fish

Acute toxicity - aquatic invertebrates Substance did not cause acute toxicity to the freshwater invertebrates
EC₅₀, 48 hours: >1000 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, > 72 hours: 1000 mg/l, Freshwater algae
Substance did not cause acute toxicity to the freshwater green algae

Acute toxicity - microorganisms EC₅₀, >: 100 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 28 days: 0.131 mg/l, Oncorhynchus mykiss (Rainbow trout)

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Chronic toxicity - aquatic invertebrates NOEC, 28 days: 0.23 mg/l, Daphnia magna

Mixture of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates

Acute aquatic toxicity

Acute toxicity - fish NOEC, 96 hours: 9.9 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 3.2 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, : >10 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms EC₂₀, 3 hours: >100 mg/l, Activated sludge

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Chronic aquatic toxicity

M factor (Chronic) 1

2-METHYLPENTANE-2,4-DIOL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 10700 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 3200 mg/l, Daphnia magna

2,6-Di-tert-butyl-p-cresol

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Chronic aquatic toxicity

NOEC 0.01 < NOEC ≤ 0.1

Degradability Rapidly degradable

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

HYDROCARBONS, C9-C11, <2% AROMATICS

Persistence and degradability The product is readily biodegradable.

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Phototransformation	Oxidises rapidly by photo-chemical reactions in air
Biodegradation	- 80 Degradation (%): 28 days Test - 301F Ready Biodegradability - Manometric Respiratory Test

12.3. Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	Not determined.

Ecological information on ingredients.

HYDROCARBONS, C9-C11, <2% AROMATICS

Bioaccumulative potential	The product contains potentially bioaccumulating substances.
Partition coefficient	log Pow: 5 - 6.7

2-METHYLPENTANE-2,4-DIOL

Partition coefficient	log Pow: 0.58
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2,6-Di-tert-butyl-p-cresol

Bioaccumulative potential	BCF: ~ 330 to 1800,
Partition coefficient	log Pow: ~ 5.1

12.4. Mobility in soil

Mobility	Volatile liquid. The product contains organic solvents which will evaporate easily from all surfaces.
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Ecological information on ingredients.

HYDROCARBONS, C9-C11, <2% AROMATICS

Mobility	The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces. Readily absorbed into soil.
Adsorption/desorption coefficient	Not available.
Surface tension	24.5 mN/m @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
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Ecological information on ingredients.

HYDROCARBONS, C9-C11, <2% AROMATICS

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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12.6. Other adverse effects

Other adverse effects	None known.
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Ecological information on ingredients.

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HYDROCARBONS, C9-C11, <2% AROMATICS

Other adverse effects Not known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
Disposal methods	Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible.
Waste class	When this coating, in its liquid state, as supplied, becomes a waste, it is categorised as hazardous waste, with code 08 01 11* (SOLVENT BASED LIQUID WASTE). Part-used containers, not drained and/or rigorously scraped out and containing dried residues of the supplied coating, are categorised as hazardous waste, with code 08 01 11* (SOLVENT BASED LIQUID WASTE). If mixed with other wastes, the above waste code may not be applicable. Used containers, drained and/or rigorously scraped out and containing dry residues of the supplied coating, are categorised as non-hazardous waste, with code 15 01 02 (plastic packaging) or 15 01 04 (metal packaging).

SECTION 14: Transport information

General For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

14.1. UN number

UN No. (ADR/RID)	1263
UN No. (IMDG)	1263
UN No. (ICAO)	1263

14.2. UN proper shipping name

Proper shipping name (ADR/RID) PAINT, Contains Low Aromatic White Spirit, Class 3, PG III, (38 °C c.c.)

Proper shipping name (IMDG) PAINT

Proper shipping name (ICAO) PAINT

14.3. Transport hazard class(es)

ADR/RID class	3
IMDG class	3

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Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS	F-E, S-E
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

SECTION 15: Regulatory information

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

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
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15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet	<p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>CAS: Chemical Abstracts Service.</p> <p>ATE: Acute Toxicity Estimate.</p> <p>LC₅₀: Lethal Concentration to 50 % of a test population.</p> <p>LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>EC₅₀: 50% of maximal Effective Concentration.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p>
Classification abbreviations and acronyms	<p>Acute Tox. = Acute toxicity</p> <p>Aquatic Acute = Hazardous to the aquatic environment (acute)</p> <p>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</p> <p>Asp. Tox. = Aspiration hazard</p> <p>Flam. Liq. = Flammable liquid</p> <p>STOT RE = Specific target organ toxicity-repeated exposure</p> <p>STOT SE = Specific target organ toxicity-single exposure</p>
Classification procedures according to Regulation (EC) 1272/2008	<p>STOT RE 1 - H372: STOT SE 3 - H336: Skin Sens. 1 - H317: : Calculation method. Aquatic Chronic 2 - H411: : Calculation method. Flam. Liq. 3 - H226: : Expert judgement.</p>
Training advice	<p>Read and follow manufacturer's recommendations. Only trained personnel should use this material.</p>
Revision comments	<p>Issued in new format for Reach compliance in accordance with EC 1272/2008 Issued in accordance with Annex II to REACH, as amended by Commission Regulation (EU) No. 2015/830 Revised formulation.</p>
Issued by	<p>Technical Dept. (P.E.)</p>
Revision date	<p>15/10/2019</p>
Revision	<p>3.0</p>
Supersedes date	<p>04/09/2018</p>
SDS number	<p>10610</p>
SDS status	<p>Approved.</p>

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Hazard statements in full

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child.
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.

Signature

Initials _____

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.