

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Mixture  
Product name : Polyurethane Varnish - Satin  
UFI : CQ90-20NH-700H-58JF  
Product code : PSVAGEN  
Type of product : Paint

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

Intended for general public  
Main use category : Professional use, Consumer use, Industrial use  
Use of the substance/mixture : Clear Varnish

**1.2.2. Uses advised against**

Restrictions on use : Any other use not identified.

**1.3. Details of the supplier of the safety data sheet****Supplier**

J.V. Barrett & Co. Ltd  
St Ivel Way  
Warmley  
BS30 8TY Bristol - United Kingdom  
T +44 (0)1179 60 00 60  
[sales@barrettine.co.uk](mailto:sales@barrettine.co.uk) - [www.barrettine.co.uk](http://www.barrettine.co.uk)

**EU**

Barrettine (Europe) Ltd  
Unit 3D North Point House, North Point Business Park,  
New Mallow Road  
T23 AT2P Cork - Ireland  
T +44 1179 60 00 60  
[sales@barrettine.co.uk](mailto:sales@barrettine.co.uk) - [www.barrettine.co.uk](http://www.barrettine.co.uk)

**1.4. Emergency telephone number**

Emergency number : +44 (0) 1179 600060 (Office hours only 8am - 5pm Mon- Thurs. 8 am - 4.30 pm Fri.)  
+44 (0) 1270 502891 (Out of hours emergency number)

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Flammable liquids, Category 3 H226  
Specific target organ toxicity — Single exposure, Category 3, Narcosis H336  
Full text of H-statements: see section 16

**Adverse physicochemical, human health and environmental effects**

Flammable liquid and vapour. May cause drowsiness or dizziness.

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

Warning

Contains :

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Hazard statements (CLP) :

H226 - Flammable liquid and vapour.

H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) :

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.

P261 - Avoid breathing vapours, spray.

P271 - Use only outdoors or in a well-ventilated area.

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 and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

P370+P378 - In case of fire: Use foam, carbon dioxide (CO<sub>2</sub>), dry extinguishing powder to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

EUH-statements :

EUH066 - Repeated exposure may cause skin dryness or cracking.

Child-resistant fastening :

Not applicable

Tactile warning :

Not applicable

### 2.3. Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	EC-No.: 919-857-5 REACH-no: 01-2119463258-33	≥ 30 – < 70	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336
Phthalic anhydride	CAS-No.: 85-44-9 EC-No.: 201-607-5 EC Index-No.: 607-009-00-4 REACH-no: 01-2119457017-41	< 3	Acute Tox. 4 (Oral), H302 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-methylpentane-2,4-diol	CAS-No.: 107-41-5 EC-No.: 203-489-0 EC Index-No.: 603-053-00-3 REACH-no: 01-2119539582-35	< 3	Skin Irrit. 2, H315 Eye Irrit. 2, H319
2,6-Di-tert-butyl-p-cresol	CAS-No.: 128-37-0 EC-No.: 204-881-4 REACH-no: 01-2119480433-40	< 3	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
calcium bis(2-ethylhexanoate)	CAS-No.: 136-51-6 EC-No.: 205-249-0 REACH-no: 2119978297-19	< 3	Eye Dam. 1, H318 Repr. 2, H361
Strontium bis(2-ethylhexanoate)	CAS-No.: 2457-02-5 EC-No.: 219-536-3 REACH-no: 01-2120783571-49	< 3	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361d
Dipropylene glycol methyl ether substance with a Community workplace exposure limit	CAS-No.: 34590-94-8 EC-No.: 252-104-2 REACH-no: 01-2119450011-60	< 3	Not classified
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	EC-No.: 918-481-9 REACH-no: 01-2119457273-39	< 3	Asp. Tox. 1, H304

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: May cause headache, nausea and irritation of respiratory tract.
Symptoms/effects after skin contact	: Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: Ingestion may cause nausea and vomiting.

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

Treat symptomatically.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.  
Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour. Heating may cause a fire or explosion.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.  
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it.

##### 6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing vapours, spray.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.  
Other information : Dispose of materials or solid residues at an authorised site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing vapours, spray.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.  
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

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### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1. National occupational exposure and biological limit values

<b>Phthalic anhydride (85-44-9)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Phthalic anhydride
Notes	Respiratory sensitizer; skin sensitizer. (Year of adoption 2010)
Regulatory reference	SCOEL Recommendations
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Phthalic anhydride
OEL TWA [2]	1 ppm
OEL STEL	12 mg/m <sup>3</sup>
Notes (IE)	Sens. (In the workplace respiratory or dermal exposures to sensitising agents may occur. Sensitizers may evoke respiratory or dermal reactions, e.g. asthma, rhinitis and allergic contact dermatitis. The notation does not distinguish between respiratory or dermal sensitisation. Chemical agents that are sensitizers present special problems in the workplace. Should an employee become sensitised, subsequent exposure may cause intense responses, even at low exposure concentrations well below the OELV. Exposure should be eliminated or significantly reduced through control measures such as engineering and process controls and use of personal protective equipment (PPE))
Regulatory reference	Chemical Agents Code of Practice 2020
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Phthalic anhydride
WEL TWA (OEL TWA) [1]	4 mg/m <sup>3</sup>
WEL STEL (OEL STEL)	12 mg/m <sup>3</sup>
Remark (WEL)	Sen (Capable of causing occupational asthma)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>2-methylpentane-2,4-diol (107-41-5)</b>	
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Hexylene glycol [2-Methylpentane-2,4-diol]
OEL STEL	125 mg/m <sup>3</sup>
OEL STEL [ppm]	25 ppm
Regulatory reference	Chemical Agents Code of Practice 2020
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	2-Methylpentane-2,4-diol
WEL TWA (OEL TWA) [1]	123 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	25 ppm
WEL STEL (OEL STEL)	123 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	25 ppm

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<b>2-methylpentane-2,4-diol (107-41-5)</b>	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>2,6-Di-tert-butyl-p-cresol (128-37-0)</b>	
<b>Ireland - Occupational Exposure Limits</b>	
Local name	2,6-Ditertiary-butyl-para-cresol [Butylated hydroxytoluene (BHT)]
OEL TWA [1]	2 mg/m <sup>3</sup>
Regulatory reference	Chemical Agents Code of Practice 2020
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	2,6-Di-tert-butyl-p-cresol
WEL TWA (OEL TWA) [1]	10 mg/m <sup>3</sup>
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>Dipropylene glycol methyl ether (34590-94-8)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	(2-Methoxymethylethoxy)-propanol
IOEL TWA	308 mg/m <sup>3</sup>
IOEL TWA [ppm]	50 ppm
Notes	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>Ireland - Occupational Exposure Limits</b>	
Local name	(2-Methoxymethylethoxy)-1-propanol [Dipropylene glycol methyl ether]
OEL TWA [1]	308 mg/m <sup>3</sup>
OEL TWA [2]	50 ppm
Notes (IE)	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2020
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	(2-methoxymethylethoxy) propanol
WEL TWA (OEL TWA) [1]	308 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	50 ppm
Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

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### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

**Appropriate engineering controls:**

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

**Personal protective equipment:**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Personal protective equipment symbol(s):**



##### 8.2.2.1. Eye and face protection

**Eye protection:**

Safety glasses

##### 8.2.2.2. Skin protection

**Skin and body protection:**

Wear suitable protective clothing

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
In case of contact through splashing	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.31		EN 374-2, EN 374-3

##### 8.2.2.3. Respiratory protection

**Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

##### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: ≈ 39 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available

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Viscosity, kinematic	: Not available
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: 0.91 @ 20 °C
Relative vapour density at 20 °C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

VOC content : < 399 g/l

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Oxidizing agent. Acids.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### Phthalic anhydride (85-44-9)

LD50 oral rat	1530 mg/kg bodyweight Animal: rat, Animal sex: male
LD50 dermal rabbit	> 3160 mg/kg Source: HSDB
LC50 Inhalation - Rat	> 2.14 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)



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<b>Phthalic anhydride (85-44-9)</b>	
LC50 Inhalation - Rat (Dust/Mist)	> 2.14 mg/l Source: ECHA
<b>2-methylpentane-2,4-diol (107-41-5)</b>	
LD50 oral rat	4700 mg/kg Source: ECHA
<b>2,6-Di-tert-butyl-p-cresol (128-37-0)</b>	
LD50 oral rat	> 2930 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	> 2000 mg/kg Source: ECHA
LC50 Inhalation - Rat (Dust/Mist)	> 2 mg/l
<b>calcium bis(2-ethylhexanoate) (136-51-6)</b>	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
<b>Strontium bis(2-ethylhexanoate) (2457-02-5)</b>	
LD50 dermal rat	2000 mg/kg
<b>Dipropylene glycol methyl ether (34590-94-8)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 19020 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	9510 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 3000 mg/m <sup>3</sup> Source: ECHA
<b>Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	≥ 3160 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
<b>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	≥ 3160 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
<b>2,6-Di-tert-butyl-p-cresol (128-37-0)</b>	
IARC group	3 - Not classifiable
<b>Phthalic anhydride (85-44-9)</b>	
NOAEL (chronic, oral, animal/male, 2 years)	3570 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)

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<b>Phthalic anhydride (85-44-9)</b>	
NOAEL (chronic, oral, animal/female, 2 years)	1785 mg/kg bodyweight Animal: mouse, Animal sex: female, Remarks on results: other:Effect type: carcinogenicity (migrated information)
<b>2,6-Di-tert-butyl-p-cresol (128-37-0)</b>	
NOAEL (chronic, oral, animal/male, 2 years)	25 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: toxicity (migrated information)
Reproductive toxicity	: Not classified
<b>Phthalic anhydride (85-44-9)</b>	
NOAEL (animal/male, F0/P)	3570 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Generation: all major organs incl. reproductive organs were examined (migrated information)
NOAEL (animal/female, F0/P)	1785 mg/kg bodyweight Animal: mouse, Animal sex: female, Remarks on results: other:Generation: all major organs incl. reproductive organs were examined (migrated information)
<b>2-methylpentane-2,4-diol (107-41-5)</b>	
LOAEL (animal/male, F0/P)	500 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:Commission Regulation (EC) No. 440/2008, Part B.3, 30 May 2008
NOAEL (animal/male, F0/P)	200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:Commission Regulation (EC) No. 440/2008, Part B.3, 30 May 2008
NOAEL (animal/female, F0/P)	≥ 1000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:Commission Regulation (EC) No. 440/2008, Part B.3, 30 May 2008
STOT-single exposure	: May cause drowsiness or dizziness.
<b>Phthalic anhydride (85-44-9)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
<b>Phthalic anhydride (85-44-9)</b>	
LOAEL (oral, rat, 90 days)	2500 mg/kg bodyweight Animal: rat, Animal sex: male
<b>2-methylpentane-2,4-diol (107-41-5)</b>	
NOAEL (oral, rat, 90 days)	450 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
<b>2,6-Di-tert-butyl-p-cresol (128-37-0)</b>	
LOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Animal sex: male
NOAEL (oral, rat, 90 days)	25 mg/kg bodyweight Animal: rat, Animal sex: male
<b>calcium bis(2-ethylhexanoate) (136-51-6)</b>	
NOAEL (subchronic, oral, animal/male, 90 days)	180 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: other:TSCA (1992) health Effects Testing Guidelines for Subchronic Oral Toxicity Studies. Title 40, CFR 798.2650.
NOAEL (subchronic, oral, animal/female, 90 days)	205 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: other:TSCA (1992) health Effects Testing Guidelines for Subchronic Oral Toxicity Studies. Title 40, CFR 798.2650.

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### Dipropylene glycol methyl ether (34590-94-8)

NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: other:KANPOGYO No.700, YAKUHATSU No. 1039.61, and KIKYKU No. 1014.
NOAEL (dermal, rat/rabbit, 90 days)	2850 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
Aspiration hazard	: Not classified

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
Not rapidly degradable	

### Phthalic anhydride (85-44-9)

LC50 - Fish [1]	> 99 mg/l Source: ECHA
EC50 - Crustacea [1]	> 640 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	68 mg/l Source: ECHA
NOEC (chronic)	16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	10 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '60 d'

### 2-methylpentane-2,4-diol (107-41-5)

LC50 - Fish [1]	8690 mg/l Source: EHCA
EC50 - Crustacea [1]	5410 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 429 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	> 429 mg/l Source: EHCA

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

LC50 - Fish [1]	> 0.57 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	0.48 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 0.4 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.023 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.053 mg/l Test organisms (species): Oryzias latipes Duration: '42 d'

### calcium bis(2-ethylhexanoate) (136-51-6)

LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	910 mg/l Test organisms (species): Daphnia magna

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<b>calcium bis(2-ethylhexanoate) (136-51-6)</b>	
EC50 72h - Algae [1]	49.3 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	63 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	25 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
<b>Dipropylene glycol methyl ether (34590-94-8)</b>	
LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Poecilia reticulata
EC50 - Other aquatic organisms [1]	1930 mg/l Test organisms (species): other aquatic crustacea:Acartia tonsa
EC50 72h - Algae [1]	> 969 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	> 969 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	0.5 mg/l Test organisms (species): Daphnia magna Duration: '22 d'
NOEC (chronic)	≥ 0.5 mg/l Test organisms (species): Daphnia magna Duration: '22 d'
<b>Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
LC50 - Fish [1]	> 1000 mg/l
EC50 - Crustacea [1]	> 1000 mg/l

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

<b>Phthalic anhydride (85-44-9)</b>	
Partition coefficient n-octanol/water (Log Pow)	1.6 Source: HSDB
<b>2-methylpentane-2,4-diol (107-41-5)</b>	
Partition coefficient n-octanol/water (Log Pow)	0.58 Source: HSDB
<b>2,6-Di-tert-butyl-p-cresol (128-37-0)</b>	
Partition coefficient n-octanol/water (Log Pow)	5.1 Source: HSDB
<b>Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
Bioaccumulative potential	No bioaccumulation data available.

### 12.4. Mobility in soil

<b>Phthalic anhydride (85-44-9)</b>	
Mobility in soil	2 Source: ECHA

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose of contents/container to a hazardous or special waste collection point. Do not burn empty packaging. Do not cut using a blowtorch.
Additional information	: Flammable vapours may accumulate in the container.
European List of Waste (LoW) code	: 08 01 11* - waste paint and varnish containing organic solvents or other dangerous substances
HP Code	: HP3 - "Flammable:" — flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; — flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; — flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; — flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; — water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; — other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1263	UN 1263	UN 1263	UN 1263	UN 1263
<b>14.2. UN proper shipping name</b>				
PAINT (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics)	PAINT (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics)	Paint (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics)	PAINT (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics)	PAINT (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
<b>Transport document description</b>				
UN 1263 PAINT (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics), 3, III, (D/E)	UN 1263 PAINT (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics), 3, III	UN 1263 Paint (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics), 3, III	UN 1263 PAINT (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics), 3, III	UN 1263 PAINT (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics), 3, III
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

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ADR	IMDG	IATA	ADN	RID
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 163, 367, 650
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T2
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	: 
Tunnel restriction code (ADR)	: D/E
EAC code	: •3YE

#### Transport by sea

Special provisions (IMDG)	: 163, 223, 367, 955
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-E
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Miscibility with water depends upon the composition.

#### Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A3, A72, A192
ERG code (IATA)	: 3L

#### Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 163, 367, 650
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01

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Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : F1  
Special provisions (RID) : 163, 367, 650  
Limited quantities (RID) : 5L  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P001, IBC03, LP01, R001  
Special packing provisions (RID) : PP1  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T2  
Portable tank and bulk container special provisions (RID) : TP1, TP29  
Tank codes for RID tanks (RID) : LGBF  
Transport category (RID) : 3  
Special provisions for carriage – Packages (RID) : W12  
Colis express (express parcels) (RID) : CE4  
Hazard identification number (RID) : 30

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	Polyurethane Varnish - Satin ; Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	Polyurethane Varnish - Satin ; 2-methylpentane-2,4-diol ; Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
40.	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : < 399 g/l

#### 15.1.2. National regulations

No additional information available

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### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

#### Indication of changes:

New format.

Indication of changes			
Section	Changed item	Change	Comments
	Supersedes version of	Modified	
	Revision date	Modified	
	Display additional SDS EU addresses	Added	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	Precautionary statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures after inhalation	Modified	
4.1	First-aid measures after eye contact	Modified	
5.2	Fire hazard	Modified	
5.3	Firefighting instructions	Added	
9.1	Relative evaporation rate (butylacetate=1)	Added	
9.1	Solubility	Added	
9.1	Relative evaporation rate (ether=1)	Added	

#### Abbreviations and acronyms

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
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level



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### Abbreviations and acronyms

NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

### Full text of H- and EUH-statements

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

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### Full text of H- and EUH-statements

H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.