

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

### 1.1. Product identifier

Trade name or designation of the mixture	CHO-SHIELD® 4997, Part C
Registration number	Not Available.
Synonyms	None.
SDS number	PHC-180 EU
Product code	4997, Part C
Issue date	12-February-2015
Version number	01

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

Identified uses	Four part conductive paint system. Professional Use Only
Uses advised against	None known.

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

Company name	Parker Hannifin Corp.
Address	Chomerics Europe - Parker Hannifin Ltd., Seal Group Unit 6 Century Point, Halifax Road High Wycombe, Bucks, HP12 3SL UK
Division	Chomerics Division
Telephone	Information +44 (0) 1494 455 400
e-mail	chomerics_europe@parker.com
Contact person	Not available.

1.4. Emergency telephone number	INFOTRAC	001-352-323-3500
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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification	R10
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The full text for all R-phrases is displayed in section 16.

#### Classification according to Regulation (EC) No 1272/2008 as amended

<b>Physical hazards</b>		
Flammable liquids	Category 3	H226 - Flammable liquid and vapour.
<b>Health hazards</b>		
Respiratory sensitisation	Category 1	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.

#### Hazard summary

Physical hazards	Flammable.
Health hazards	Occupational exposure to the substance or mixture may cause adverse health effects.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	Material will float on water and can be re-ignited at the water's surface. Vapours are heavier than air and may spread along floors. Burning produces obnoxious and toxic fumes. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. See ECOLOGICAL INFORMATION, Section 12.

## Main symptoms

May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema.  
May cause allergic respiratory reaction (sensitization) with asthmatic symptoms such as wheezing and chest tightness.  
May be mildly irritating to skin, eyes and respiratory system. Symptoms may include eye and nose irritation, dry or sore throat, runny nose, shortness of breath and wheezing. Symptoms may include stinging and tearing. Prolonged or repeated contact may cause drying, cracking, or irritation.  
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

## 2.2. Label elements

### Label according to Regulation (EC) No. 1272/2008 as amended

#### Contains:

Cobalt Naphthenate

#### Hazard pictograms



#### Signal word

Danger

#### Hazard statements

H226

Flammable liquid and vapour.

H317

May cause an allergic skin reaction.

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### Precautionary statements

#### Prevention

P210

Keep away from heat, sparks and open flames. - No smoking.

P261

Avoid breathing vapours.

P280

Wear protective gloves and eye/face protection.

P284

Wear respiratory protection.

#### Response

P304 + P340

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342 + P311

If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

P370 + P378

In case of fire: use dry chemical, CO<sub>2</sub>, or 'alcohol foam' to extinguish.

#### Storage

None assigned.

#### Disposal

P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Supplemental label information

Not applicable.

## 2.3. Other hazards

Other hazards which do not result in classification:

Material will float on water and can be re-ignited at the water's surface. Vapours are heavier than air and may spread along floors. Burning produces obnoxious and toxic fumes. May be mildly irritating to skin, eyes and respiratory system. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

PBT assessment: Contains no substances, at reportable levels, considered to be persistent, bioaccumulating nor toxic (PBT).

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Propylene glycol monomethyl ether acetate	95 - 100	108-65-6 203-603-9	Not Available.	607-195-00-7	#
<b>Classification:</b>	<b>DSD:</b> R10				
	<b>CLP:</b> Flam. Liq. 3;H226				
Cobalt Naphthenate	< 1,0	61789-51-3 263-064-0	Not Available.	None.	#; Self classified.
<b>Classification:</b>	<b>DSD:</b> F;R11, Carc. Cat. 3;R40, Xn;R48/22, R42/43				
	<b>CLP:</b> Flam. Sol. 2;H228, Skin Sens. 1;H317, Resp. Sens. 1;H334, Carc. 2;H351, STOT RE 2;H373				

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
VM&P Naphtha	< 1,0	8032-32-4 232-453-7	Not Available.	649-263-00-9	None.
<b>Classification:</b>	<b>DSD:</b> F+;R12, Xn;R20-65, N;R51/53				P
	<b>CLP:</b> Flam. Liq. 1;H224, Asp. Tox. 1;H304, Acute Tox. 4;H332, Aquatic Chronic 2;H411				P

#### List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

#: This substance has been assigned Community workplace exposure limit(s).

\*Designates: some classifications listed are in addition to those appearing in Annex VI of Regulation (EC) No. 1272/2008.

**Composition comments** The full text for all R- and H-phrases is displayed in section 16.

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 4.1. Description of first aid measures

**Inhalation** IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, trained personnel should give oxygen. If breathing stops, provide artificial respiration. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

**Skin contact** IF ON SKIN: Gently wash with plenty of soap and water. Remove contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eye(s) with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. When symptoms persist or in all cases of doubt, seek medical advice.

**Ingestion** If swallowed, do NOT induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. When symptoms persist or in all cases of doubt, seek medical advice.

**4.2. Most important symptoms and effects, both acute and delayed** May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema.  
May cause allergic respiratory reaction (sensitization) with asthmatic symptoms such as wheezing and chest tightness.  
May be mildly irritating to skin, eyes and respiratory system. Symptoms may include stinging and tearing. Inhalation of extremely high concentrations may cause dizziness, disorientation, incoordination, narcosis, nausea or narcotic effects. Symptoms may include eye and nose irritation, dry or sore throat, runny nose, shortness of breath and wheezing. Prolonged or repeated contact may cause drying, cracking, or irritation.  
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically.

## SECTION 5: Firefighting measures

**General fire hazards** Flammable liquid and vapour. Will be easily ignited by heat, spark or flames.

### 5.1. Extinguishing media

**Suitable extinguishing media** Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Alcohol resistant foam. Water fog.

**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** Material will float and may ignite on surface of water. Vapours are heavier than air and may spread along floors. The pressure in sealed containers can increase under the influence of heat. Burning produces obnoxious and toxic fumes.  
The following may be released during a fire: Carbon oxides. Aldehydes. Hydrocarbons.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Firefighters should wear full protective clothing including self contained breathing apparatus. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Special fire fighting procedures** Evacuate area and fight fire from a safe distance. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel** Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up.

**For emergency responders** Keep unnecessary personnel away. Restrict access to area until completion of clean-up. Wear appropriate protective equipment and clothing during clean-up.

**6.2. Environmental precautions** Prevent entry into waterways, sewer, basements or confined areas. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply. Contact local authorities in case of spillage to drain/aquatic environment.

**6.3. Methods and material for containment and cleaning up** Ventilate the area. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Use only non-sparking tools. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand). Pick up and transfer to properly labeled containers. Contact the proper local authorities.

Never return spills in original containers for re-use. Contaminated absorbent material may pose the same hazards as the spilled product.

**6.4. Reference to other sections** For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted. Medical supervision of employees who come into contact with respiratory sensitizers is recommended.

Use only with adequate ventilation. Wear appropriate personal protective equipment. Wear protective gloves and eye/face protection. See Section 8 for personal protective equipment. Avoid breathing vapour. Avoid contact with eyes, skin, and clothing. Keep away from heat and open flames-No smoking. Use only non-sparking tools. Ground/bond container and receiving equipment. Take precautionary measures against static discharges. Keep away from incompatibles. Keep containers closed when not in use. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Empty containers retain residue and can be dangerous.

**7.2. Conditions for safe storage, including any incompatibilities** Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep in a cool place. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Protect against physical damage. Inspect periodically for damage or leaks.

**7.3. Specific end use(s)** Coating.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Finland. Workplace Exposure Limits

Components	Type	Value
Cobalt Naphthenate (CAS 61789-51-3)	TWA	0,02 mg/m3
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3
	TWA	100 ppm 270 mg/m3 50 ppm

##### France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	VLE	550 mg/m3
	VME	110 ppm 275 mg/m3 50 ppm

##### Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	AGW	270 mg/m3
		50 ppm

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

Components	Type	Value
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3
	TWA	275 mg/m3

**Italy. Occupational Exposure Limits**

Components	Type	Value
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3
	TWA	100 ppm 275 mg/m3 50 ppm

**Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment**

Components	Type	Value
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	520 mg/m3
	TWA	260 mg/m3

**Spain. Occupational Exposure Limits**

Components	Type	Value
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3
	TWA	100 ppm 275 mg/m3 50 ppm

**UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value
Cobalt Naphthenate (CAS 61789-51-3)	TWA	0,1 mg/m3
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	548 mg/m3
	TWA	100 ppm 274 mg/m3 50 ppm

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU**

Components	Type	Value
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3
	TWA	100 ppm 275 mg/m3 50 ppm

**Biological limit values****France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)**

Components	Value	Determinant	Specimen	Sampling time
Cobalt Naphthenate (CAS 61789-51-3)	15 µg/l	Cobalt	Urine	*
	1 µg/l	Cobalt	Blood	*

\* - For sampling details, please see the source document.

**Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices**

Components	Value	Determinant	Specimen	Sampling time
Cobalt Naphthenate (CAS 61789-51-3)	0,03 mg/g	Cobalt	Creatinine in urine	*
	0,058 µmol/mmol	Cobalt	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4**

Components	Value	Determinant	Specimen	Sampling time
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Cobalt Naphthenate (CAS 61789-51-3)	15 µg/l	Cobalto	Urine	*
	1 µg/l	Cobalto	Blood	*

\* - For sampling details, please see the source document.

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no-effect level (DNEL)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

**Exposure guidelines****EU Exposure Limit Values: Skin designation**

Propylene glycol monomethyl ether acetate (CAS 108-65-6)

Can be absorbed through the skin.

**8.2. Exposure controls**

**Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Explosion proof exhaust ventilation should be used. In case of insufficient ventilation, wear suitable respiratory equipment.

**Individual protection measures, such as personal protective equipment**

**General information** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** Wear eye/face protection. Wear as appropriate: Wear safety glasses with side shields (or goggles). A full face shield may also be necessary. See also EN 166. Eye wash fountain is recommended.

**Skin protection**

**- Hand protection** Wear protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

**- Other** Wear suitable protective clothing. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. Eye wash facilities and emergency shower must be available when handling this product.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. Advice should be sought from respiratory protection specialists.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** Contaminated work clothing should not be allowed out of the workplace. Avoid breathing vapour. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when using the product. Remove soiled clothing and wash it thoroughly before reuse. Handle in accordance with good industrial hygiene and safety practices.

**Environmental exposure controls** Environmental manager must be informed of all major releases.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties****Appearance**

**Physical state** Liquid.

**Form** Liquid. Transparent liquid.

**Colour** Purple

**Odour** Solvent.

**Odour threshold** Not available.

**pH** Not available.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available

**Flash point** 42,0 °C (107,6 °F) Closed cup (based on ingredients)

Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Vapour pressure	Not available.
Vapour density	> 1 (Air = 1)
Relative density	1 g/cm <sup>3</sup>
Solubility(ies)	
Solubility (water)	Insoluble.
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidizing properties	None known.

## 9.2. Other information

Partition coefficient (oil/water)	Not available
Percent volatile	100 %
Specific gravity	1
VOC (Weight %)	970 g/l

## SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions. Prolonged contact with air may cause formation of explosive peroxides. Rate of peroxide formation is not known.
10.3. Possibility of hazardous reactions	Hazardous polymerisation does not occur. No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not use in areas without adequate ventilation.
10.5. Incompatible materials	Oxidizing agents. Acids. Bases. Halogenated materials. Reactive metals.
10.6. Hazardous decomposition products	None known. In the event of fire the following can be released: Carbon oxides. Hydrocarbons. Aldehydes.

## SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
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### Information on likely routes of exposure

Inhalation	May cause mild irritation to the nose, throat and upper respiratory tract. May cause sensitisation by inhalation.
Skin contact	May cause mild skin irritation. May cause sensitisation by skin contact.
Eye contact	May cause mild eye irritation.
Ingestion	May cause irritation of the gastrointestinal tract.

Symptoms	May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema. May cause allergic respiratory reaction (sensitization) with asthmatic symptoms such as wheezing and chest tightness. May be mildly irritating to skin, eyes and respiratory system. Symptoms may include eye and nose irritation, dry or sore throat, runny nose, shortness of breath and wheezing. Symptoms may include stinging and tearing. Inhalation of extremely high concentrations may cause dizziness, disorientation, incoordination, narcosis, nausea or narcotic effects. Prolonged or repeated contact may cause drying, cracking, or irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
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### 11.1. Information on toxicological effects

Acute toxicity	According to the classification criteria of the European Union, this product is not considered as being an acutely toxic chemical. See below for individual ingredient acute toxicity data.
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Components	Species	Test results
Cobalt Naphthenate (CAS 61789-51-3)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg (No mortality)
<i>Oral</i>		
LD50	Rat	3129 mg/kg
Propylene glycol monomethyl ether acetate (CAS 108-65-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 19200 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 5320 ppm, 4 hours (Vapour) > 28,7 mg/l, 4 hours (Vapour)
<i>Oral</i>		
LD50	Rat	8532 mg/kg
VM&P Naphtha (CAS 8032-32-4)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg (No mortality)
<i>Inhalation</i>		
LC50	Rat	3400 ppm, 4 Hours 16 mg/l, 4 hours
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
<b>Skin corrosion/irritation</b>	According to the classification criteria of the European Union, the product is not considered as being a skin corrosive or irritant.	
<b>Serious eye damage/eye irritation</b>	According to the classification criteria of the European Union, the product is not considered as causing eye damage or irritation.	
<b>Respiratory sensitisation</b>	This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification: Respiratory Sensitization - Category 1. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic respiratory reaction (sensitization) with asthmatic symptoms such as wheezing and chest tightness.	
<b>Skin sensitisation</b>	May cause an allergic skin reaction. This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification: Skin Sensitization - Category 1. May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema.	
<b>Germ cell mutagenicity</b>	Contains no ingredient listed as a mutagen.	
<b>Carcinogenicity</b>	This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended. Contains: Cobalt naphthenate. Cobalt naphthenate is listed as possibly carcinogenic to humans by IARC (Category 2B). Cobalt naphthenate is considered a 'Cobalt compound'. However, the concentration of the hazardous ingredient(s) in this mixture is below the concentration cutoff required for classification.	
<b>Reproductive toxicity</b>	Contains no ingredient listed as toxic to reproduction	
<b>Specific target organ toxicity - single exposure</b>	According to the classification criteria of the European Union, this product is not expected to cause target organ toxicity through single exposures.	
<b>Specific target organ toxicity - repeated exposure</b>	According to the classification criteria of the European Union, this product is not expected to cause target organ toxicity through repeated exposures.	
<b>Aspiration hazard</b>	This product is not classified as an aspiration hazard.	
<b>Mixture versus substance information</b>	No information available.	
<b>Other information</b>	No additional hazards known.	

## SECTION 12: Ecological information

### 12.1. Toxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. No data is available on the product itself. See below for individual ingredient ecotoxicity data.



Components	Species		Test results
Cobalt Naphthenate (CAS 61789-51-3)			
Aquatic			
Chronic			
Fish	NOEC	Fathead minnow (Pimephales promelas)	2,2374 mg/l, 34 days
Propylene glycol monomethyl ether acetate (CAS 108-65-6)			
Aquatic			
Acute			
Algae	EC50	Green Algae (Scenedesmus subspicatus)	> 1000 mg/l, 72 hours
Crustacea	EC50	Water flea (Daphnia magna)	373 mg/l, 48 hours
Fish	LC50	Japanese rice fish (Oryzias latipes)	> 100 mg/l, 96 hours
Chronic			
Crustacea	NOEC	Water flea (Daphnia magna)	> 100 mg/l, 21 days
VM&P Naphtha (CAS 8032-32-4)			
Aquatic			
Acute			
Algae	EC50	Green Algae (Pseudokirchneriella subcapitata)	3,1 mg/l, 72 hours
Crustacea	EC50	Water flea (Daphnia magna)	4,5 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	1,2 mg/l, 96 hours
Chronic			
Algae	NOEC	Green Algae (Pseudokirchneriella subcapitata)	0,5 mg/l, 72 hours
Crustacea	NOEC	Water flea (Daphnia magna)	0,17 mg/l, 21 days
12.2. Persistence and degradability	No data is available on the degradability of this product.		
12.3. Bioaccumulative potential	The product itself has not been tested. See the following data for ingredient information.		
Partition coefficient n-octanol/water (log Kow)			
Propylene glycol monomethyl ether acetate	0,36		
VM&P Naphtha	3,6 - 5,7		
Bioconcentration factor (BCF)			
VM&P Naphtha	105 - 1216		
12.4. Mobility in soil	The product itself has not been tested.		
12.5. Results of PBT and vPvB assessment	Contains no substances, at reportable levels, considered to be persistent, bioaccumulating nor toxic (PBT).		
12.6. Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

<b>14.1. UN number</b>	UN1993
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<b>14.2. UN proper shipping name</b>	Flammable liquids, n.o.s. (Propylene glycol monomethyl ether acetate)
<b>14.3. Transport hazard class(es)</b>	
Class	3
Subsidiary risk	None.
Label(s)	3
Hazard No. (ADR)	30
Tunnel restriction code	D/E
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

#### RID

<b>14.1. UN number</b>	UN1993
<b>14.2. UN proper shipping name</b>	FLAMMABLE LIQUID, N.O.S. (Propylene glycol monomethyl ether acetate)
<b>14.3. Transport hazard class(es)</b>	
Class	3
Subsidiary risk	None.
Label(s)	3
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

#### IATA

<b>14.1. UN number</b>	UN1993
<b>14.2. UN proper shipping name</b>	Flammable liquid, n.o.s. (Propylene glycol monomethyl ether acetate)
<b>14.3. Transport hazard class(es)</b>	
Class	3
Subsidiary risk	None.
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	No.
<b>ERG Code</b>	3L
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Refer to the appropriate Packing Instruction, prior to shipping this material. Review all State and Operator Variations, prior to shipping this material.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed.
<b>Cargo aircraft only</b>	Allowed.

#### IMDG

<b>14.1. UN number</b>	UN1993
<b>14.2. UN proper shipping name</b>	FLAMMABLE LIQUID, N.O.S. (Propylene glycol monomethyl ether acetate)
<b>14.3. Transport hazard class(es)</b>	
Class	3
Subsidiary risk	None.
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	
Marine pollutant	No.
<b>EmS</b>	F-E, <u>S</u> -E
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not established.



## General information

This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See ECOLOGICAL INFORMATION, Section 12.

## SECTION 15: Regulatory information

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

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I**

Not listed.

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### Authorisations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

VM&P Naphtha (CAS 8032-32-4)

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

VM&P Naphtha (CAS 8032-32-4)

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding**

VM&P Naphtha (CAS 8032-32-4)

#### Other EU regulations

**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not listed.

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

Propylene glycol monomethyl ether acetate (CAS 108-65-6)

VM&P Naphtha (CAS 8032-32-4)

**Directive 94/33/EC on the protection of young people at work**

VM&P Naphtha (CAS 8032-32-4)

#### Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

#### National regulations

Young people under 18 years old are not allowed to work with this product according to EU

Directive 94/33/EC on the protection of young people at work.

Follow national regulation for work with chemical agents.

German legislation on water endangering substances VwVwS: Water contaminating class - 1 (self classified)

## SECTION 16: Other information

### List of abbreviations

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road  
AGW: Arbeitsplatzgrenzwert (Workplace limit value)  
CAS: Chemical Abstract Services  
CEN: Comité Européen de Normalisation (European Committee for Standardization)  
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.  
DSD: Dangerous Substances Directive  
EC: European Community  
EC50: Effective Concentration 50%.  
ECHA: European Chemical Agency.  
EEC: European Economic Community  
EINECS: European Inventory of Existing Commercial chemical Substances  
EN: European Standard  
ERG: Emergency Response Guidebook  
EU: European Union  
HSDB® - Hazardous Substances Data Bank  
IATA: International Air Transport Association  
IBC: Intermediate Bulk Container  
IMDG: International Maritime Dangerous Goods  
INRS: L'Institut national de recherche et de sécurité  
LC: Lethal Concentration  
LD: Lethal Dose  
MAC: Maximaal Aanvaarde Concentratie (Maximum Accepted Concentration)  
NOEC: No observable effect concentration  
OECD: Organisation for Economic Cooperation and Development  
OEL: National occupational exposure limits  
PEL: Permissible exposure limit  
PPE: Personal Protective Equipment  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail  
RTECS: Registry of Toxic Effects of Chemical Substances  
SCBA: self-contained breathing apparatus  
SDS: Safety Data Sheet  
STEL: Short Term Exposure Limit  
TRGS: Technischen Regeln für Gefahrstoffe (Technical Rules for Hazardous Substances)  
TWA: Time Weighted Average  
UN: United Nations  
VLE: Valeurs limites d'exposition (Exposure limit value)  
VME: valeurs limites de moyenne d'exposition (Average exposure limit value)

### References

Canadian Centre for Occupational Health and Safety, CCInfoWeb Databases, 2015  
(Chempendium, RTECs, HSDB, INCHEM)  
European Chemicals Agency, Classification Legislation, 2015.  
European Chemicals Bureau, Existing Chemicals Work Area, EINECS Information System, 2015.  
Material Safety Data Sheet from manufacturer.  
OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2015.  
The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

### Information on evaluation method leading to the classification of mixture

### Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R10 Flammable.  
R11 Highly flammable.  
R12 Extremely flammable.  
R20 Harmful by inhalation.  
R40 Limited evidence of a carcinogenic effect.  
R42/43 May cause sensitisation by inhalation and skin contact.  
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65 Harmful: may cause lung damage if swallowed.  
H224 Extremely flammable liquid and vapour.  
H226 Flammable liquid and vapour.  
H228 Flammable solid.  
H304 May be fatal if swallowed and enters airways.  
H317 May cause an allergic skin reaction.

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H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

None.

Follow training instructions when handling this material.

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