Revision: 2



SAFETY DATA SHEET

TENSORGRIP TC41 INFUSION RTM MOULD SPRAY ADHESIVE AEROSOL

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

1.1. Product Identifier	
Product name	TENSORGRIP TC41 INFUSION RTM MOULD SPRAY ADHESIVE AEROSOL
1.2. Relevant identified uses	s of the substance or mixture and uses advised against
Identified uses	Adhesive.
Uses advised against	Use only for intended applications.
1.3. Details of the supplier of	of the safety data sheet
Supplier	QUIN GLOBAL (UK) LTD PO BOX 7634 PERTH PH2 1GA technical.uk@quinglobal.com +44 (0)845 381 2233
1.4. Emergency telephone r	umber
Emergency telephone	+44 (0)845 381 2233 (Mon - Fri) 09:00 - 16:00
SECTION 2: Hazards Identi	fication
2.1. Classification of the sub	ostance or mixture
Classification (EC 1272/200	8)
Physical hazards	Aerosol 1 - H222, H229
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H336 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 3 - H412
2.2. Label elements Pictogram	
Signal word	Danger
Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects.
	THATZ Harmut to aquatic me with long lasting enects.

www.goessl-pfaff.de Gößl & Pfaff GmbH - Münchener Straße 13 - 85123 Karlskron/Braullach - Telefon 0 64 50.9 32-0 - Fax 9 32-13 - E-Mail info@goessl-pfaff.de

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Precautionary statements	 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTER/ doctor if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
	P501 Dispose of contents/ container in accordance with national regulations.
Contains	methyl acetate, Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, White mineral oil (petroleum)
Supplementary precautionary statements	 P261 Avoid breathing spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P337+P313 If eye irritation persists: Get medical advice/ attention. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

Petroleum gases, liquefied		30-60%
CAS number: 68476-85-7	EC number: 270-704-2	
Classification		
Flam. Gas 1 - H220		
Press. Gas, Liquefied - H280		
methyl acetate		10-30%
CAS number: 79-20-9	EC number: 201-185-2	REACH registration number: 01-
		2119459211-47-XXXX
Classification		
Flam. Liq. 2 - H225		
Eye Irrit. 2 - H319		
STOT SE 3 - H336		



Hydrocarbons, C6-C7, n-alkanes, k hexane	soalkanes, cyclics, <5% n-	10)-309
CAS number: —	EC number: 921-024-6	REACH registration number: 01- 2119475514-35-XXXX	
Classification			
Flam. Liq. 2 - H225			
Skin Irrit. 2 - H315			
STOT SE 3 - H336			
Asp. Tox. 1 - H304			
Aquatic Chronic 2 - H411			_
White mineral oil (petroleum)			1-59
CAS number: 8042-47-5	EC number: 232-455-8	REACH registration number: 01- 2119487078-27-XXXX	
		2119487078-27-XXXX	_
Classification			
Asp. Tox. 1 - H304			
-Hexane			<1
CAS number: 110-54-3	EC number: 203-777-6	REACH registration number: 01- 2119480412-44-XXXX	
Classification			
Flam. Liq. 2 - H225			
Skin Irrit. 2 - H315			
Repr. 2 - H361f			
STOT SE 3 - H336			
STOT RE 2 - H373			
Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411			
cyclohexane			<1
CAS number: 110-82-7	EC number: 203-806-2		
/ factor (Acute) = 1	M factor (Chronic) = 1		
Classification			
lam. Liq. 2 - H225			
Skin Irrit. 2 - H315			
STOT SE 3 - H336			
Asp. Tox. 1 - H304			
Aquatic Acute 1 - H400			
Aquatic Chronic 1 - H410			_
o Full Toyt for all D Dhrassa and L	lazard Statements are Displayed in Se	action 16	

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. Give plenty of water 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	Remove contamination with soap and water or recognised skin cleansing agent. Continue to rinse for at least 15 minutes. If adhesive bonding occurs, do not force skin apart.	
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes and get medical attention. If adhesive bonding occurs, do not force eyelids apart.	
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.	
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	A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect. During application and drying, solvent vapours will be emitted. Vapours in high concentrations are narcotic.	
Ingestion	May cause stomach pain or vomiting. May cause drowsiness or dizziness.	
Skin contact	Redness. Irritating to skin. Bonds skin and eyes in seconds.	
Eye contact	Irritating to eyes. Bonds skin and eyes in seconds.	
4.3. Indication of any immediate	e medical attention and special treatment needed	
Notes for the doctor	Treat symptomatically.	
SECTION 5: Firefighting measure	Jres	
5.1. Extinguishing media		
Suitable extinguishing media	The product is flammable. 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	Containers can burst violently or explode when heated, due to excessive pressure build-up. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Vapours may form explosive mixtures with air.	



Hazardous combustion	Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO2). Carbon monoxide (CO). Harmful gases or vapours.
5.3. Advice for firefighters	
Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. 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. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
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	se measures
6.1. Personal precautions, pro	tective 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. Evacuate area. Risk of explosion. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.
6.2. Environmental precaution	S
Environmental precautions	Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).
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. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Approach the spillage from upwind. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Flush away spillage with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
6.4. Reference to other section	15
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 sto	rage

7.1. Precautions for safe handling

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Usage precautions	For professional users only. 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. Avoid exposing aerosol containers to high temperatures or
	direct sunlight. The product is flammable. Keep away from heat, hot surfaces, sparks, open
	flames and other ignition sources. No smoking. Do not handle until all safety precautions have
	been read and understood. Do not handle broken packages without protective equipment. Do
	not spray on an open flame or other ignition source. Do not pierce or burn, even after use.
	Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with
	skin. Avoid contact with eyes.
Advice on general	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash
occupational hygiene	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	ge, including any incompatibilities
Storage precautions	Store at temperatures between 10°C and 25°C. Store away from incompatible materials (see Section 10). Store in accordance with national regulations. Keep away from oxidising materials, heat and flames. Keep only in the original container. Keep container tightly closed
	and in a well-ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not
	expose to temperatures exceeding 50°C/122°F. 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 compressed gas storage.
7.3. Specific end use(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
SECTION 8: Exposure Contro	ols/personal protection
8.1. Control parameters	

Occupational exposure limits

Petroleum gases, liquefied

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³ Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

methyl acetate

Long-term exposure limit (8-hour TWA): WEL 200 ppm 616 mg/m³ Short-term exposure limit (15-minute): WEL 250 ppm 770 mg/m³

n-Hexane

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m³

Cyclohexane

Long-term exposure limit (8-hour TWA): WEL 100 ppm 350 mg/m³ Short-term exposure limit (15-minute): WEL 300 ppm 1050 mg/m³ WEL = Workplace Exposure Limit

methyl acetate (CAS: 79-20-9)



DNEL	Workers - Inhalation; Long term systemic effects: 610 mg/m ³ Workers - Inhalation; Long term local effects: 305 mg/m ³ Workers - Dermal; Long term systemic effects: 88 mg/kg/day General population - Inhalation; Long term systemic effects: 131 mg/m ³ General population - Inhalation; Long term local effects: 152 mg/m ³ General population - Dermal; Long term systemic effects: 44 mg/kg/day General population - Oral; Long term systemic effects: 44 mg/kg/day
PNEC	 Fresh water; 0.12 mg/l Marine water; 0.012 mg/l Intermittent release; 1.2 mg/l STP; 600 mg/l Sediment (Freshwater); 0.128 mg/kg Sediment (Marinewater); 0.013 mg/kg Soil; 20.4 mg/kg
Hydro	ocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
DNEL	Workers - Inhalation; Long term systemic effects: 2035 mg/m³ Workers - Dermal; Long term systemic effects: 773 mg/kg/day General population - Inhalation; Long term systemic effects: 608 mg/kg/day General population - Dermal; Long term systemic effects: 699 mg/kg/day General population - Oral; Long term systemic effects: 699 mg/kg/day
	Resin acids and Rosin acids, esters with glycerol
DNEL	Workers - Inhalation; Long term systemic effects: 44.6 mg/m ³ Workers - Dermal; Long term systemic effects: 6.3 mg/kg/day General population - Inhalation; Long term systemic effects: 13.2 mg/m ³ General population - Dermal; Long term systemic effects: 3.8 mg/kg/day General population - Oral; Long term systemic effects: 3.8 mg/kg/day
PNEC	 Fresh water; 0.027 mg/l Marine water; 0.003 mg/l Intermittent release; 0.27 mg/l STP; 2 mg/l Sediment (Freshwater); 625.79 mg/kg Sediment (Marinewater); 62.58 mg/kg Soil; 125 mg/kg
Pentae	erythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)
DNEL	Workers - Inhalation; Long term systemic effects: 9.5 mg/m ³ Workers - Dermal; Long term systemic effects: 27 mg/kg/day General population - Inhalation; Long term systemic effects: 2.3 mg/m ³ General population - Dermal; Long term systemic effects: 13.5 mg/kg/day General population - Oral; Long term systemic effects: 1.4 mg/kg/day
PNEC	 Fresh water; 0.04 mg/l Marine water; 0.004 mg/l Intermittent release; 0.86 mg/l STP; 1 mg/l Sediment (Freshwater); 4000000 mg/kg Sediment (Marinewater); 400000 mg/kg Soil; 798000 mg/kg
8.2. Exposure controls	



Protective equipment



controls

Appropriate engineering



Provide adequate ventilation. 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 the ventilation system is regularly maintained and tested. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

Eye/face protectionEyewear 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. Wear tight-fitting, chemical splash goggles or face
shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protectionChemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and bodyAppropriate footwear and additional protective clothing complying with an approved standardprotectionshould be worn if a risk assessment indicates skin contamination is possible.

Hygiene measuresProvide eyewash station and safety shower. Contaminated work clothing should not be
allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment
and the work area every day. 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. Preventive industrial medical examinations should be carried
out. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protectionRespiratory protection complying with an approved standard should be worn if a risk
assessment indicates inhalation of contaminants is possible. 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.

Environmental exposure Keep container tightly sealed when not in use.

controls

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Green. or Clear,
Odour	Strong.

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TENSORGRIP TC41 INFUSION RTM MOULD SPRAY ADHESIVE AEROSOL

Odour threshold	Not available.	
рН	Not available.	
Melting point	Not available.	
Initial bolling point and range	Not determined.	
Flash point	-104°C	
Evaporation rate	Not available.	
Evaporation factor	Not available.	
Flammability (solid, gas)	Not available.	
Upper/lower flammability or explosive limits	: 1.8	
Vapour pressure	482.63 kPa @ °C	
Vapour density	Not available.	
Relative density	Not available.	
Bulk density	0.70-0.74 kg/m³	
Solubility(ies)	Slightly soluble in water.	
Partition coefficient	Not available.	
Auto-ignition temperature	Not determined.	
Decomposition Temperature	Not available.	
Viscosity	Not available.	
Explosive properties	Not available.	
Oxidising properties	Not available.	
9.2. Other information		
Volatile organic compound	This product contains a maximum VOC content of <427 g/l.	
SECTION 10: Stability and rea	activity	
10.1. Reactivity		
Reactivity	Stable at normal ambient temperatures and when used as recommended.	
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 exposing aerosol containers to high temperatures or direct sunlight. Containers can burst violently or explode when heated, due to excessive pressure build-up.	
10.5. Incompatible materials		



Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
10.6. Hazardous decompositio	n products
Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Acrid smoke or fumes.
SECTION 11: Toxicological inf	ormation
11.1. Information on toxicologie	cal effects
Acute toxicity - oral	
Notes (oral LD _m)	Based on available data the classification criteria are not met.
Acute toxicity - dermal Notes (dermal LD ₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation Notes (inhalation LC _®)	Based on available data the classification criteria are not met.
Skin corrosion/irritation Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity Carcinogenicity	Based on available data the classification criteria are not met.
Reproductive toxicity Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Specific target organ toxicity -	
STOT - single exposure	May cause drowsiness or dizziness.
Target organs	Central nervous system
Specific target organ toxicity -	repeated exposure
STOT - repeated exposure	Based on available data the classification criteria are not met.
Aspiration hazard	
Aspiration hazard	May be fatal if swallowed and enters airways.
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect. During application and drying, solvent vapours will be emitted. Vapours in high concentrations are narcotic.

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Ingestion	Gastrointestinal symptoms, including upset stomach.
Skin contact	Redness. Irritating to skin. Bonds skin and eyes in seconds.

Eye contact Irritating to eyes. Bonds skin and eyes in seconds.

Toxicological information on ingredients.

Petroleum gases, liquefied

Germ cell mutagenicity	
Genotoxicity - in vivo	Chromosome aberration: Negative.
Reproductive toxicity	
Reproductive toxicity - fertility	- NOAEC 10000 ppm, Inhalation, Rat P
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 10426 ppm, Inhalation, Rat
Specific target organ toxici	ty - repeated exposure
STOT - repeated exposure	NOAEC 10000 ppm, Inhalation, Rat
	methyl acetate
Acute toxicity - oral	
Acute toxicity oral (LD _® mg/kg)	6,482.0
Species	Rat
ATE oral (mg/kg)	6,482.0
Acute toxicity - dermal	
Notes (dermal LD₀₀)	LD₅₀ : > 2000 mg/kg, Dermal, Rat
Skin corrosion/irritation	
Animal data	Dose: 0.5 ml, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). Not irritating.
Serious eye damage/irritati	on
Serious eye damage/irritation	Dose: 0.1 ml, 1 - 72 hours, Rabbit Irritating.
Skin sensitisation	
Skin sensitisation	Guinea pig maximization test (GPMT) - Human: Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Gene mutation: Negative.
Genotoxicity - in vivo	Chromosome aberration: Negative.
Specific target organ toxicit	y - single exposure
STOT - single exposure	May cause drowsiness or dizziness.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Acute toxicity - oral

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Acute toxicity oral (LDe mg/kg)	5,840.0
Species	Rat
ATE oral (mg/kg)	5,840.0
Acute toxicity - dermai	
Acute toxicity dermai (LD _{en} mg/kg)	2,800.0
Species	Rat
ATE dermal (mg/kg)	2,800.0
Acute toxicity - inhalation	
Notes (Inhalation LC.)	LC₅₀ : >25.2 mg/l, Inhalation, Vapour, Rat 4 hours
Skin corrosion/Irritation	
Animai data	Dose: 0.5 ml, 4 hours, Rabbit Erythema/eschar score: Very slight erythema - barely perceptible (1). Primary dermal irritation index: 0.67 Oedema score: No oedema (0). Irritating.
Serious eye damage/irritate	on
Serious eye damage/irritation	Dose: 0.2 ml, 7 days, Rabbit Not irritating.
Skin sensitisation	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. Read-across data.
Reproductive toxicity	
Reproductive toxicity - fertility	Two-generation study - NOAEL 31680 mg/m³, Inhalation, Rat P
Reproductive toxicity - development	Developmental toxicity: - NOAEC: > 7000 ppm, Inhalation, Rabbit Read-across data.
Specific target organ toxicit	y - single exposure
STOT - single exposure	STOT SE 3 - H336 May cause drowsiness or dizziness.
Target organs	Central nervous system
Specific target organ toxicit	y - repeated exposure
STOT - repeated exposure	NOAEC 14000 mg/m³, Inhalation, Rat
Aspiration hazard	
Aspiration hazard	Aspiration hazard if swallowed.
	Resin acids and Rosin acids, esters with glycerol
Acute toxicity - oral	
Notes (oral LD ₅₀)	LD₅₀ : > 2000 mg/kg, Orał, Rat
Acute toxicity - dermal	

Notes (dermal LD ₁₀)	LD∞ : > 2000 mg/kg, Dermal, Rat	
Serious eye damage/irritat	lon	
Serious eye damage/irritation	Dose: 100 mg, 72 hours, Rabbit Slightly irritating.	
Skin sensitisation		
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising.	
	White mineral oil (petroleum)	
Acute toxicity - oral		
Notes (oral LD ₁₀)	LD₅₀ : > 5000 mg/kg, Oral, Rat	
Acute toxicity - dermal		
Notes (dermal LD ₁₀₀)	LD₅₀ : > 2000 mg/kg, Dermal, Rabbit	
Acute toxicity - Inhalation		
Notes (inhalation LC.)	LC∞ : > 5 mg/l, Inhalation, Aerosol, Rat 4 hours	
Skin corrosion/Irritation		
Animai data	Dose: 0.5 ml, 24 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). Not irritating.	
Serious eye damage/irritation		
Serious eye damage/irritation	Dose: 0.1 ml, 1 - 2 seconds, Rabbit Not irritating.	
Skin sensitisation		
Skin sensitisation	Buehler test - Guinea pig: Not sensitising.	
Germ cell mutagenicity		
Genotoxicity - In vitro	Bacterial reverse mutation test: Negative.	
Carcinogenicity		
Carcinogenicity	NOAEL ≥ 1200 mg/kg/day, Oral, Rat	
Reproductive toxicity		
Reproductive toxicity - fertility	Screening - NOAEL \geq 1000 mg/kg/day, Dermal, Rat P	
Reproductive toxicity - development	Developmental toxicity: - NOAEL: > 5000 mg/kg/day, Oral, Rat	
Specific target organ toxicity - repeated exposure		
STOT - repeated exposure	NOAEL ≥ 20000 ppm, Oral, Rat	
	n-Hexane	
Acute toxicity - oral		
Acute toxicity oral (LD ₅₀ mg/kg)	16,000.0	
Species	Rat	
ATE oral (mg/kg)	16,000.0	

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Acute toxicity - dermal			
Acute toxicity dermal (LD _{eo} mg/kg)	3,350.0		
Species	Rabbit		
Notes (dermal LD ₁₀₀)	Read-across data.		
ATE dermal (mg/kg)	3,350.0		
Acute toxicity - inhalation			
Notes (inhalation LC.)	LC₅₀ : >5000 ppm, Inhalation, Vapour, Rat		
Skin corrosion/irritation			
Animal data	Rabbit Primary dermal irritation index: 1.92 Irritating. Read-across data.		
Skin sensitisation			
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising.		
Germ cell mutagenicity			
Genotoxicity - in vitro	Gene mutation: Negative.		
Genotoxicity - in vivo	Chromosome aberration: Negative.		
Reproductive toxicity			
Reproductive toxicity - fertllity	Two-generation study - NOAEC 3000 ppm, Inhalation, Rat F1 Suspected of damaging fertility.		
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 200 ppm, Inhalation, Rat		
Specific target organ toxicit	y - single exposure		
STOT - single exposure	STOT SE 3 - H336 May cause drowsiness or dizziness.		
Target organs	Central nervous system		
Specific target organ toxicit	y - repeated exposure		
STOT - repeated exposure	NOAEL 1135 mg/kg, Oral, Rat May cause damage to organs through prolonged or repeated exposure.		
Target organs	Nervous system		
Aspiration hazard			
Aspiration hazard	Aspiration hazard if swallowed.		
Pentae	Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)		
Acute toxicity - oral			
Notes (oral LD ₈₀)	LD₅₀ : > 5000 mg/kg, Oral, Mouse		
Acute toxicity - dermal			
Notes (dermal LD ₅₀)	LD₅₀ : > 3160 mg/kg, Dermal, Rabbit		
Acute toxicity - inhalation			
Notes (inhalation LC.)	LC_{50} : > 1951 mg/m ³ , Inhalation, Aerosol, Rat 4 hours		
Skin corrosion/irritation			

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Animal data	Dose: 500 mg, 24 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). Not irritating.	
Serious eye damage/irritat	lon	
Serious eye damage/irritation	Not irritating.	
Skin sensitisation		
Skin sensitisation	- Guinea pig: Not sensitising.	
Germ cell mutagenicity		
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative.	
Genotoxicity - in vivo	Chromosome aberration: Negative.	
Carcinogenicity		
Carcinogenicity	NOAEL 10000 ppm, Oral, Rat	
Reproductive toxicity		
Reproductive toxicity - fertility	Two-generation study - NOAEL \geq 1000 ppm, Oral, Rat F1	
Specific target organ toxicity - repeated exposure		
STOT - repeated exposure	NOAEL 10000 ppm, Oral, Rat	
	Cyclohexane	
Acute toxicity - oral		
Notes (oral LD _{eo})	LD₅₀ : > 5000 mg/kg, Oral, Rat	
Acute toxicity - dermal		
Notes (dermal LD _{®0})	LD₅₀ : > 2000 mg/kg, Dermal, Rabbit	
Acute toxicity - Inhalation		
Notes (Inhalation LC ₂₀)	LC₅₀ : > 32880 mg/m³, Inhalation, Vapour, Rat 4 hours	
Skin corrosion/Irritation		
Skin corrosion/irritation	Causes skin irritation.	
Skin sensitisation		
Skin sensitisation	Buehler test - Guinea pig: Not sensitising.	
Germ cell mutagenicity		
Genotoxicity - In vitro	Bacterial reverse mutation test: Negative.	
Genotoxicity - In vivo	Chromosome aberration: Negative.	
Reproductive toxicity		
Reproductive toxicity - fertility	Two-generation study - NOAEC 500 - 2000 ppm, Inhalation, Rat P	
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 7000 ppm, Inhalation, Rabbit	
Specific target organ toxicity - single exposure		
STOT - single exposure	May cause drowsiness or dizziness.	



Target organs	Central nervous system
Aspiration hazard	
Aspiration hazard	May be fatal if swallowed and enters airways.
SECTION 12: Ecological Information	xn

12.1. Toxicity

Toxicity

Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

methyl acetate

Acute toxicity - fish	LC ₀ , 48 hours: 250 mg/l, Brachydanio rerio (Zebra Fish) LC ₅₀ , 48 hours: 250 - 350 mg/l, Brachydanio rerio (Zebra Fish) LC ₁₀₀ , 48 hours: 500 mg/l, Brachydanio rerio (Zebra Fish) LC ₀ , 96 hours: 250 mg/l, Brachydanio rerio (Zebra Fish) LC ₅₀ , 96 hours: 250 - 350 mg/l, Brachydanio rerio (Zebra Fish) LC ₁₀₀ , 96 hours: 500 mg/l, Brachydanio rerio (Zebra Fish)	
Acute toxicity - aquatic invertebrates	EC₀, 48 hours: 362 mg/l, Daphnia magna EC₅₀, 48 hours: 1026.7 mg/l, Daphnia magna EC₁₀₀, 48 hours: 1448.2 mg/l, Daphnia magna	
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 120 mg/l, Desmodesmus subspicatus EC ₁₀₀ , 72 hours: > 100 mg/l, Desmodesmus subspicatus NOEC, 72 hours: 120 mg/l, Desmodesmus subspicatus	
Acute toxicity - microorganisms	EC₅₀, 16 hours: 6000 mg/l, Pseudomonas putida	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane		
Toxicity	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.	
Acute toxicity - fish	LL₅₀, 72 hours: 10 mg/l, Onchorhynchus mykiss (Rainbow trout)	
Acute toxicity - aquatic invertebrates	EL50, 48 hours: 3 mg/l, Daphnia magna	
Acute toxicity - aquatic plants	EL50, 72 hours: 10-30 mg/l, Pseudokirchneriella subcapitata	
Chronic toxicity - fish early life stage	NOELR, 28 days: 2.045 mg/l, Onchorhynchus mykiss (Rainbow trout)	
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.17 mg/l, Daphnia magna LOEC, 21 days: 0.32 mg/l, Daphnia magna EC₅o, 21 days: 0.23 mg/l, Daphnia magna	
	Resin acids and Rosin acids, esters with glycerol	
Acute toxicity - microorganisms	NOEC, 28 days: 20 mg/l, Activated sludge	

White mineral oil (petroleum)



Acute toxicity - fish	LL₅₀, 96 hours: > 100 mg/l, Onchorhynchus mykiss (Rainbow trout)	
Acute toxicity - aquatic invertebrates	LL₅₀, 48 hours: > 100 mg/l, Daphnia magna	
	n-Hexane	
Toxicity	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.	
Acute toxicity - fish	LL₅₀, 96 hours: 12.51 mg/l, Onchorhynchus mykiss (Rainbow trout) Calculation method.	
Acute toxicity - aquatic invertebrates	EL50, 48 hours: 21.85 mg/l, Daphnia magna Estimated value.	
Acute toxicity - aquatic plants	NOELR, 72 hours: 2.077 mg/l, Selenastrum capricornutum Estimated value.	
Chronic toxicity - fish early life stage	NOELR, 28 days: 2.8 mg/l, Onchorhynchus mykiss (Rainbow trout) Estimated value.	
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 4.888 mg/l, Daphnia magna Estimated value.	
Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)		
Acute toxicity - fish	LC₀, 96 hours: \ge 100 mg/l, Brachydanio rerio (Zebra Fish) LC₅₀, 96 hours: > 100 mg/l, Brachydanio rerio (Zebra Fish)	
Acute toxicity - aquatic invertebrates	EC₀, 24 hours: 31 mg/l, Daphnia magna EC₅, 24 hours: > 86 mg/l, Daphnia magna EC₁∞, 24 hours: > 86 mg/l, Daphnia magna	
Acute toxicity - aquatic plants	EC∞, 72 hours: > 100 mg/l, Desmodesmus subspicatus NOEC, 72 hours: 100 mg/l, Desmodesmus subspicatus	
Acute toxicity - microorganisms	IC₅₀, 3 hours: > 100 mg/l, Activated sludge	
	Cyclohexane	
Toxicity	Very toxic to aquatic life with long lasting effects.	
Acute aquatic toxicity		
LE(C)∞	$0.1 < L(E)C50 \le 1$	
M factor (Acute)	1	
Acute toxicity - fish	LC_{50} , 96 hours: 4.53 mg/l, Pimephales promelas (Fat-head Minnow)	
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 0.9 mg/l, Daphnia magna EC₅₀, 48 hours: 2.4 mg/l, Daphnia magna	
Acute toxicity - aquatic plants	EC₅₀, 72 hours: 3.4 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hours: 0.9 mg/l, Pseudokirchneriella subcapitata	
Acute toxicity - terrestrial	LC₅₀, 48 hours: >1 mg/cm², Eisenia Fetida (Earthworm)	
Chronic aquatic toxicity		



M factor (Chronic)

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

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Ecological information on ingredients.

	Petroleum gases, Ilquefied	
Phototransformation	Air - DT₅₀ : 1906 days	
Biodegradation	Water - Degradation (100%): 385.5 hours The substance is readily biodegradable.	
	methyl acetate	
Phototransformation	Air - DT₅₀ : 50.4 days	
Biodegradation	Water - Degradation (70%): 28 days The substance is readily biodegradable.	
Hyd	rocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
Biodegradation	Water - Degradation (83%): 16 days Water - Degradation (98%): 28 days The substance is readily biodegradable.	
	n-Hexane	
Biodegradation	Water - Degradation (83%): 10 days Water - Degradation (98%): 28 days	
Penta	aerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)	
Phototransformation	Air - DT₅₀ : 0.15 days	
Biodegradation	Water - Degradation (5%): 28 days No biodegradation observed under test conditions.	
	Cyclohexane	
Phototransformation	Air - DT₅₀ : 52 hours	
Biodegradation	Water - Degradation (77%): 28 days The substance is readily biodegradable.	
12.3. Bioaccumulative potential		
Bioaccumulative potential No data	a available on bioaccumulation.	
Partition coefficient Not ava	ilable.	
Ecological information on ingredients.		
Hyd	rocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
Bioaccumulative potential	No data available on bioaccumulation.	

Resin acids and Rosin acids, esters with glycerol

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	Partition coefficient	log Pow: 3.31	
		n-Hexane	
	Bloaccumulative potential	BCF: 501, Pimephales promelas (Fat-head Minnow) Calculation method.	
	Partition coefficient	log Pow: 4	
	Pentaerythritol tetrakis(3-(3,5-di-tert-butyi-4-hydroxyphenyi)propionate)		
	Bioaccumulative potential	The product is not bioaccumulating.	
	Partition coefficient	log Pow: 22.7	
		Cyclohexane	
	Partition coefficient	log Pow: 3.44	
12.4. Mobil	ity in soil		
Mobility	The pro- surfaces	duct contains volatile organic compounds (VOCs) which will evaporate easily from all s.	
Ecological information on ingredients.			
methyl acetate			
	Adsorption/desorption coefficient	Water - Log Koc: 0.18 @ 40°C	
	Henry's law constant	6.43 Pa m³/mol @ 20°C	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane			
	Mobility	The product has poor water-solubility.	
	Surface tension	20.9 mN/m @ 25°C	
		n-Hexane	
	Mobility	The product has poor water-solubility.	
	Adsorption/desorption coefficient	Log Koc: 3.34 Calculation method.	
	Surface tension	18.2 mN/m @ 25°C	
Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)			
	Henry's law constant	0 Pa m³/mol @ 25°C	
		Cyclohexane	
	Mobility	The product is soluble in water.	
	Adsorption/desorption coefficient	Log Koc: 2.89	
	Henry's law constant	14 900 Pa m³/mol @ 20°C	
12.5. Resul	ts of PBT and vPvB assessm	lent	



Results of PBT and vPvB This product does not contain any substances classified as PBT or vPvB. **assessment**

Ecological information on ingredients.

Petroleum gases, liquefied

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. **assessment**

methyl acetate

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. **assessment**

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. **assessment**

Resin acids and Rosin acids, esters with glycerol

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. **assessment**

White mineral oil (petroleum)

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. **assessment**

n-Hexane

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. **assessment**

Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. **assessment**

Cyclohexane

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. **assessment**

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods



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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. Empty containers must not be punctured or incinerated because of the risk of an explosion. 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.

SECTION 14: Transport information

14.1. UN number	
UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
UN No. (ADN)	1950
14.2. UN proper shipping name	<u>)</u>
Proper shipping name (ADR/RID)	AEROSOLS
Proper shipping name (IMDG)	AEROSOLS
Proper shipping name (ICAO)	AEROSOLS
Proper shipping name (ADN)	AEROSOLS
14.3. Transport hazard class(e	<u>6)</u>
ADR/RID class	2.1
ADR/RID classification code	5F
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1
ADN class	2.1
Transport labels	



14.4. Packing group	
ADR/RID packing group	None
IMDG packing group	None
ADN packing group	None

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ICAO packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

None

14.6. Special precautions for user

EmS	F-D, S-U
ADR transport category	2
Emergency Action Code	2YE
Tunnel restriction code	(D)

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

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

SECTION 15: Regulatory information

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

National regulations	EH40/2005 Workplace exposure limits. The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).
EU legislation	 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). 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). Council Directive of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers (75/324/EEC) (as amended).
Guidance	Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other Information



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.



