

Safety Data Sheet

according to UK REACH Regulation

Release spray TRS

Revision date: 05.06.2021

Product code: 165105

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

Release spray TRS

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

Release spray

1.3. Details of the supplier of the safety data sheet

Company name:	R&G Faserverbundwerkstoffe GmbH	
	Composite Technology	
Street:	Im Meißel 7 - 13	
Place:	D-71111 Waldenbuch	
Post-office box:	1145	
	D-71107 Waldenbuch	
Telephone:	+49 (0)7157 5304-60	Telefax: +49 (0)7157 5304-70
e-mail:	info@r-g.de	
Contact person:	Michael Groß	Telephone: +49 (0)7157 5304-60
e-mail:	urlaubmg@r-g.de	
Internet:	www.r-g.de	
Responsible Department:	Management	

1.4. Emergency telephone number: Vergiftungs-Informationen-Zentrale Freiburg
Tel: +49 (0)761 19240

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Hazard categories:
 Aerosol: Aerosol 1
 Skin corrosion/irritation: Skin Irrit. 2
 Serious eye damage/eye irritation: Eye Irrit. 2
 Specific target organ toxicity - single exposure: STOT SE 3
 Hazardous to the aquatic environment: Aquatic Chronic 2
 Hazard Statements:
 Extremely flammable aerosol.
 Pressurised container: May burst if heated.
 Causes skin irritation.
 May cause drowsiness or dizziness.
 Toxic to aquatic life with long lasting effects.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

Kohlenwasserstoffe, C7, n-Alkane, Isoalkane, Cycloalkane
 Kohlenwasserstoffe, C7-C9, n-Alkane, Isoalkane, Cycloalkane
 Kohlenwasserstoffe, C6-C7, n-Alkane, Isoalkane, Cycloalkane, <5% n-Hexan
 Kohlenwasserstoffe, C9-C10, n-Alkane, Isoalkane, Cycloalkane, <2% Aromaten

Signal word: Danger

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Pictograms:**Hazard statements**

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P501	Inhalt/Behälter gemäß Sondervorschrift 327 ADR der Problemabfallentsorgung zuführen.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Special labelling of certain mixtures

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

2.3. Other hazards

Adverse physicochemical effects:

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

The accumulation in lowlying or closed rooms can cause increased danger of fire and explosion.

Vapours can travel considerable distances to a source of ignition where they can ignite, flash back, or explode.

Vapours of flammable solvents can accumulate in the gas phase of closed container, especially during heat treatment. Therefore keep away from fire and sources of ignition.

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The product will be applied by spraying.

The product does have a sealed spraying device.

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This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe).

In use may form flammable/explosive vapour-air mixture.

Even after use and until complete evaporation of the flammable components, there is still a danger of an explosive steam-air mixture forming.

The product does have a sealed spraying device.

Caution! Container under pressure.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Aerosol: Active substances with propane/butane as propellant gas.

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes			30 - < 35 %
	927-510-4		01-2119475515-33	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
106-97-8	butane			30 - < 35 %
	203-448-7	601-004-00-0		
	Flam. Gas 1, Dissolved gas; H220 H280			
74-98-6	propane			10 - < 15 %
	200-827-9	601-003-00-5		
	Flam. Gas 1; H220			
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cycloalkanes, <5% n-hexane			5 - < 10 %
	921-024-6		01-2119475514-35	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes			5 - < 10 %
	920-750-0		01-2119473851-33	
	Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411 EUH066			
64742-49-0	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics			1 - < 5 %
	927-241-2		01-2119471843-32	
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 3; H226 H336 H304 H412 EUH066			
78-92-2	butan-2-ol			1 - < 5 %
	201-158-5	603-127-00-5	01-2119475146-36	
	Flam. Liq. 3, Eye Irrit. 2, STOT SE 3, STOT SE 3; H226 H319 H335 H336			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
64742-49-0	927-510-4	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes	30 - < 35 %
		inhalation: LC50 = 23,3 mg/l (vapours); dermal: LD50 = > 2800 mg/kg; oral: LD50 = 5840 mg/kg	
74-98-6	200-827-9	propane	10 - < 15 %
		inhalation: LC50 = 800000 ppm (gases)	
64742-49-0	921-024-6	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cycloalkanes, <5% n-hexane	5 - < 10 %
		inhalation: LC50 = 25,2 mg/l (vapours); dermal: LD50 = 2800 mg/kg; oral: LD50 = 5840 mg/kg	
64742-49-0	920-750-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes	5 - < 10 %
		inhalation: LC50 = > 23,3 mg/l (vapours); dermal: LD50 = > 2800 mg/kg; oral: LD50 = > 5840 mg/kg	
64742-49-0	927-241-2	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics	1 - < 5 %
		dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	
78-92-2	201-158-5	butan-2-ol	1 - < 5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2054 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information

Remove affected person from the danger area and lay down. Take off immediately all contaminated clothing and wash it before reuse. Put victim at rest, cover with a blanket and keep warm. Do not leave affected person unattended. Move a vomiting patient lying on his back into a stable position on his side. If breathing is irregular or stopped, administer artificial respiration. If unconscious but breathing normally, place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Self-protection of the first aider : Personal protection equipment: see section 8 First Aid.

Notes to physician: No special measures are necessary.

After inhalation

Remove victim out of the danger area. Provide fresh air. In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxilolon spray, Pulmicort-dosage-spray. (Auxilolon and Pulmicort are registered trademarks.) Call a physician immediately. Consult a doctor immediately in the case of inhaling spray mist and show him packing or label. Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

After contact with skin

Wash immediately with: water and soap. Rub greasy ointment into the skin.

Do not wash with: Solvents/Thinner

In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

After ingestion

Do NOT induce vomiting. Give nothing to eat or drink. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician immediately.

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

The following symptoms may occur: Cough, Dyspnoea , Cyanosis (blue coloured blood), Acidosis, Depression of central nervous system, Headache, Nausea, Dizziness, Dizziness, Inebriation, Unconsciousness.

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

Treat symptomatically.

Regulation of the blood circulation, possible shock treatment.

Where appropriate artificial ventilation.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Water mist, Carbon dioxide (CO₂), Foam, Extinguishing powder.

Fire rating: B (Fires of liquids or liquid turning substances).

Unsuitable extinguishing media

Full water jet, Water spray jet

5.2. Special hazards arising from the substance or mixture

Gases emitted by burning organic materials must always be classified as respiratory poisons. Burning produces heavy smoke.

Hazardous combustion products:

Carbon monoxide Carbon dioxide (CO₂), Hydrocarbons, Pyrolysis products, toxic.

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5.3. Advice for firefighters

Usual measures for fire prevention. Co-ordinate fire-fighting measures to the fire surroundings. In case of fire and/or explosion do not breathe fumes. In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. Beware of reignition. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Fire residue and contaminated firefighting water must be disposed of in accordance with government regulations.

Additional information

Special protective equipment for firefighters Wear a self-contained breathing apparatus and chemical protective clothing. DIN-/EN-Norms 469

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Avoid contact with skin, eyes, and clothing. Do not breathe vapour/aerosol. Remove all sources of ignition. Move persons to safety. Be aware that gases can spread at ground level (heavier than air) and pay attention to the wind direction. Provide adequate ventilation.

For non-emergency personnel Use personal protection equipment.

For emergency responders: Use personal protection equipment. Use personal protection equipment.

For non-emergency personnel

Use personal protective equipment. The personal protective equipment must be adapted to the situation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Ensure waste is collected and contained. Suppress gases/vapours/mists with water spray jet. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For containment

Eliminate leaks if safe to do so. Remove container from the discharge area. Prevent expansion over a wide area (e.g. by containment or oil booms). Remove from the water surface (e.g. skim or vacuum). Cover the sewage system.

For cleaning up

Clean-up methods for large quantities of spilled material: Absorb with liquid-binding material (sand, diatomaceous earth, acid binders, universal binders). Shovel up and place in suitable containers for disposal. If large quantities of spilled material cannot be contained, the local authorities should be notified. should be notified. Clean-up methods for small quantities of spilled material: Clean up spilled quantities immediately. Wipe up with absorbent material (e.g. cloth, fleece). Collect in suitable, closed containers and take for disposal. Clean contaminated surfaces thoroughly. Recommended cleaning agents: Clean with detergents. Avoid solvents. Retain and dispose of contaminated wash water. Ensure that all waste water is collected and treated by a sewage treatment plant. Ventilate the affected area.

Other information

Suitable material to pick up: Sand Diatomaceous earth Universal binder Absorbent material, organic

6.4. Reference to other sections

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Advice on safe handling

Measures to prevent aerosol and dust generation

It is recommended to design all work processes always so that the following is excluded: Inhalation of vapours or spray/mists, Eye contact, skin contact.

Technical ventilation of workplace. Vapours are heavier than air. Provide room air exhaust at ground level.

During filling, metering and sampling should be used if possible: Splashproof grounded devices. Devices with local exhaust Use only in a exhaust booth with integrated air filter. Use in ventilated spray booths only. Ensure that fresh air is supplied to the breathing zone of the operator and exhaust air is removed in his back!

Recirculation of exhaust air is not recommended.

Advice on protection against fire and explosion

Measures to prevent fire :

Extremely flammable. Vapours can form potentially explosive mixtures with air. Reignition possible over considerable distance. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Use non-sparking tools. Flammable vapours can accumulate in head space of closed systems. Only use the material in places where open light, fire and other flammable sources can be kept away. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Usual measures for fire prevention. Wear anti-static footwear and clothing

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Further information on handling

Environmental precautions:

Shafts and sewers must be protected from entry of the product. Transfer wash-downs in sealed containers. For restriction of emission on volatile organic compounds (VOC) the solvent vapours should be supplied to an exhaust air purification facility (filter, gas washer, incineration).

Advices on general occupational hygiene :

Use personal protection equipment. Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500. General health and safety measures The usual precautions when handling chemicals must be observed. Working places should be designed to allow cleaning at any time.

Floors, walls and other surfaces in the hazard area must be cleaned regularly. Clean spray booth and exhaust hood completely with every product change. When using do not eat, drink, smoke, sniff. Thorough skin-cleansing after handling the product. Used working clothes should not be worn outside the work area.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Suitable floor material: Floors should be impervious, resistant to liquids and easy to clean.

Protect against: heat, Cold.

Recommended temperature for storage: +10 - +30°C

Keep away from: Food and feedingstuffs

Keep/Store only in original container.

Hints on joint storage

Do not store together with:

Explosive hazardous substances, Other potentially explosive hazardous substances, flammable solids, Pyrophoric or self-heating substances, Hazardous substances that release flammable gases when in contact with water, Highly oxidising substances, Oxidising substances, Ammonium nitrate and preparations containing ammonium nitrate, Organic peroxides and self-reactive substances, Infectious substances, Radioactive

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substances

Further information on storage conditions

Technical measures and storage conditions

The applicable provisions of the water and building legislation must be observed. Heating causes rise in pressure with risk of bursting. Keep away from sources of ignition - No smoking. Keep in a cool, well-ventilated place. Keep receptacles tightly sealed. Protect containers against damage. Ensure adequate ventilation of the storage area. Store small packages in a suitable, robust cabinet. Do not store out of doors.

7.3. Specific end use(s)

Lubricants, greases, release products

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
78-92-2	Butan-2-ol	100	308		TWA (8 h)	WEL
		150	462		STEL (15 min)	WEL
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

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DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes		
Worker DNEL, long-term	dermal	systemic	300 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	2085 mg/m ³
Consumer DNEL, long-term	dermal	systemic	149 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	447 mg/m ³
Consumer DNEL, long-term	oral	systemic	149 mg/kg bw/day
74-98-6	propane		
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cycloalkanes, <5% n-hexane		
Worker DNEL, long-term	inhalation	systemic	2035 mg/m ³
Worker DNEL, long-term	dermal	systemic	773 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	608 mg/m ³
Consumer DNEL, long-term	dermal	systemic	699 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	699 mg/kg bw/day
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes		
Worker DNEL, long-term	inhalation	systemic	2035 mg/m ³
Worker DNEL, long-term	dermal	systemic	773 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	608 mg/m ³
Consumer DNEL, long-term	dermal	systemic	699 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	699 mg/kg bw/day
64742-49-0	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics		
Worker DNEL, long-term	inhalation	systemic	871 mg/m ³
Worker DNEL, long-term	dermal	systemic	77 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	185 mg/m ³
Consumer DNEL, long-term	dermal	systemic	46 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	46 mg/kg bw/day
78-92-2	butan-2-ol		
Worker DNEL, long-term	dermal	systemic	405 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	212 mg/m ³
Consumer DNEL, long-term	dermal	systemic	203 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	52 mg/m ³
Consumer DNEL, long-term	oral	systemic	15 mg/kg bw/day

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PNEC values

CAS No	Substance	
Environmental compartment		Value
74-98-6	propane	
78-92-2	butan-2-ol	
Freshwater		47,1 mg/l
Marine water		47,1 mg/l
Freshwater sediment		196,19 mg/kg
Marine sediment		196,19 mg/kg
Secondary poisoning		1000 mg/kg
Micro-organisms in sewage treatment plants (STP)		761 mg/l
Soil		11,58 mg/kg

8.2. Exposure controls**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Combination filtering device A1P1/A2P2

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

Physical state: Aerosol
Colour: white
Odour: characteristic

Changes in the physical state

Melting point/freezing point: not determined
Boiling point or initial boiling point and boiling range: > - 42 °C
Flash point: > - 97 °C

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Flammability

Solid/liquid: not applicable

Gas: not applicable

Lower explosion limits: 0,6 vol. %

Upper explosion limits: 11 vol. %

Auto-ignition temperature: > 200 °C

Self-ignition temperature

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties

Not oxidising.

pH-Value: not determined

Water solubility: < 50 g/L

(at 20 °C)

Solubility in other solvents

miscible with most organic solvents

Partition coefficient n-octanol/water: not determined

Vapour pressure: < 3000 hPa

(at 20 °C)

Vapour pressure: < 7000 hPa

(at 50 °C)

Density (at 20 °C): 0,645 g/cm³

Relative vapour density: > 2,0

9.2. Other information**Other safety characteristics**

Solvent content: 56 %

Solid content: not determined

Evaporation rate: not determined

Further Information**SECTION 10: Stability and reactivity****10.1. Reactivity**

The product is chemically stable under recommended conditions of storage, use and temperature.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Heat, naked flames and other ignition sources.

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

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SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes					
	oral	LD50 mg/kg	5840	rat	ECHA	
	dermal	LD50 mg/kg	> 2800	rat	ECHA	
	inhalation (4 h) vapour	LC50	23,3 mg/l	rat	ECHA	OECD 403
74-98-6	propane					
	inhalation gas	LC50 ppm	800000	Rat	ECHA	
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cycloalkanes, <5% n-hexane					
	oral	LD50 mg/kg	5840	rat	ECHA	
	dermal	LD50 mg/kg	2800	rat	ECHA	
	inhalation vapour	LC50	25,2 mg/l	rat	ECHA	
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes					
	oral	LD50 mg/kg	> 5840	Rat	ECHA	OECD 401
	dermal	LD50 mg/kg	> 2800	Rat	ECHA	OECD 402
	inhalation (4 h) vapour	LC50 mg/l	> 23,3	Rat	ECHA	OECD 403
64742-49-0	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics					
	oral	LD50 mg/kg	> 5000	Rat	ECHA	OECD 401
	dermal	LD50 mg/kg	> 5000	Rat	ECHA	OECD 402
78-92-2	butan-2-ol					
	oral	LD50 mg/kg	2054	Rat	ECHA	OECD 423
	dermal	LD50 mg/kg	> 2000	Rat	ECHA	OECD 402

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information**12.1. Toxicity**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes					
	Acute fish toxicity	LC50 > 13,4 mg/l	96 h	Oncorhynchus mykiss	ECHA	OECD 203
	Acute algae toxicity	ErC50 10-30 mg/l	72 h	Pseudokirchneriella subcapitata	ECHA	OECD 201
	Acute crustacea toxicity	EL50 3 mg/l	48 h	Daphnia magna	ECHA	OECD 202
	Fish toxicity	NOEC 1,534 mg/l	28 d	Oncorhynchus mykiss	ECHA	
	Algae toxicity	NOEC 6,3 mg/l	4 d	Pseudokirchneriella subcapitata	ECHA	OECD 201
	Crustacea toxicity	NOEC 0,17 mg/l	21 d	Daphnia magna	ECHA	OECD 211
	Acute bacteria toxicity	(26,81 mg/l)		Tetrahymena pyriformis	ECHA	
106-97-8	butane					
	Acute fish toxicity	LC50 24,11 mg/l	96 h	fish	ECHA	
	Acute algae toxicity	ErC50 7,71 mg/l	96 h	Green algae	ECHA	
	Acute crustacea toxicity	EC50 14,22 mg/l	48 h	Daphnia magna	ECHA	
74-98-6	propane					
	Acute fish toxicity	LC50 49,9 mg/l	96 h	fish	ECHA	
	Acute algae toxicity	ErC50 19,37 mg/l	96 h	algae	ECHA	
	Acute crustacea toxicity	EC50 69,43 mg/l	48 h	Daphnia	ECHA	
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cycloalkanes, <5% n-hexane					
	Acute fish toxicity	LC50 11,4 mg/l	96 h	Oncorhynchus mykiss	ECHA	OECD 203
	Acute algae toxicity	ErC50 10 - 30 mg/l	72 h	Raphidocelis	ECHA	OECD 201
	Acute crustacea toxicity	EC50 3 mg/l	48 h	Daphnia magna	ECHA	OECD 202
	Fish toxicity	NOEC 2,045 mg/l	28 d	Oncorhynchus mykiss	ECHA	
	Algae toxicity	NOEC 3 mg/l	3 d	Daphnia magna	ECHA	OECD 201
	Crustacea toxicity	NOEC 1 mg/l	21 d	Pseudokirchneriella subcapitata	ECHA	OECD 211
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes					
	Acute fish toxicity	LC50 3-10 mg/l	96 h	Oncorhynchus mykiss	ECHA	OECD 203
	Acute algae toxicity	ErC50 10-30 mg/l		Pseudokirchneriella subcapitata	ECHA	OECD 201
	Acute crustacea toxicity	EC50 4,6-10 mg/l	48 h	Daphnia magna	ECHA	OECD 202
	Fish toxicity	NOEC 0,574 mg/l	28 d	Oncorhynchus mykiss	ECHA	
	Algae toxicity	NOEC 10 mg/l	3 d	Pseudokirchneriella subcapitata	ECHA	OECD 201

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	Crustacea toxicity	NOEC mg/l	0,17		Daphnia magna	ECHA	OECD 211
64742-49-0	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics						
	Acute fish toxicity	LC50	30 mg/l	96 h	Oncorhynchus mykiss	ECHA	OECD 203
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Pseudokirchneriella subcapitata	ECHA	OECD 201
	Acute crustacea toxicity	EC50	46 mg/l	48 h	Daphnia magna	ECHA	OECD 202
	Fish toxicity	NOEC mg/l	0,182	28 d	Oncorhynchus mykiss	ECHA	
	Algae toxicity	NOEC	< 1 mg/l	3 d	Pseudokirchneriella subcapitata	ECHA	OECD 201
	Crustacea toxicity	NOEC mg/l	0,317	21 d	Daphnia magna	ECHA	
	Acute bacteria toxicity	(1065 mg/l)			Tetrahymena pyriformis	ECHA	
78-92-2	butan-2-ol						
	Acute fish toxicity	LC50 mg/l	3670	96 h	Pimephales promelas	GESTIS	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64742-49-0	Hydrocarbons, C7, n-alkanes, isoalkanes, cycloalkanes			
	OECD 301F	98%	28	
	readily biodegradable			
106-97-8	butane			
	Gas exchange-biodegradation experiment	> 70 %	10	
	readily biodegradable			
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cycloalkanes, <5% n-hexane			
	OECD 301F	98 %	28	
	readily biodegradable			
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes			
	OECD 301F	98 %	28	
	readily biodegradable			
64742-49-0	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics			
	OECD 301F	89 %	28	
	readily biodegradable			
78-92-2	butan-2-ol			
	EU Method C.5 / EU Method C.6	86 %	5	ECHA
	readily biodegradable			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
106-97-8	butane	2,8
74-98-6	propane	2,36
78-92-2	butan-2-ol	0,65

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12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.7. Other adverse effects

Keine Daten verfügbar.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - used product

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150111 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

<u>14.1. UN number:</u>	UN 1950
<u>14.2. UN proper shipping name:</u>	AEROSOLS
<u>14.3. Transport hazard class(es):</u>	2
<u>14.4. Packing group:</u>	-
Hazard label:	2.1



Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Transport category:	2
Tunnel restriction code:	D

Other applicable information (land transport)

E0

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Inland waterways transport (ADN)**Other applicable information (inland waterways transport)**

Not classified for this transport carrier.

Marine transport (IMDG)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS (Naphtha (Petroleum), hydrotreated, light)
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1



Special Provisions:	63, 190, 277, 327, 344, 959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS, flammable
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1



Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

Other applicable information (air transport)

ERG Kodex: 10L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha

14.6. Special precautions for user

Warning: Flammable gases.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 29, Entry 40

2004/42/EC (VOC): 97 %

Additional information

Aerosol directive (75/324/EEC)

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

2 - obviously hazardous to water

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 1,2,3,4,6,8,9,10,14,15.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)