according to Regulation (EC) No 1907/2006

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

1.1. Product identifier

Release Wax (165100x)

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

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
Internet: www.r-g.de
Responsible Department: Management

1.4. Emergency telephone Vergiftungs-Informations-Zentrale Freiburg

<u>number:</u> Tel: +49 (0)761 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 3

Specific target organ toxicity - single exposure: STOT SE 3

Aspiration hazard: Asp. Tox. 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Flammable liquid and vapour.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Hydrocarbons, C9-C10, n-alkanes, iso-alkanes, cyclic, aromatic (<2%)

Hydrocarbons, C9, arom.

Signal word: Danger

Pictograms:







Hazard statements

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

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smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use Water mist/Extinguishing powder/Foam/Carbon dioxide (CO2) to

extinguish.

Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

Additional advice on labelling

The product is classified and labelled under the EC Directives/hazardous substances laws (GefStoffV).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Dispersion of waxes in a mixture of solvents.

Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification according to Regulation (EC) No. 1272/2008 [CLP]					
64742-49-0	(Naphtha (petroleum)< 0,1 % Benzene, ETHYL METHYLETHYLKETONE)),			80 - < 85 %		
64742-95-6	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified			15 - < 20 %		
	265-199-0	649-356-00-4				
	Flam. Liq. 3, STOT SE 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H335 H336 H304 H411 EUH066					

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Change contaminated clothing. Remove affected person from the danger area and lay down. If victim is at risk of losing consciousness, position and transport on their side. Put victim at rest, cover with a blanket and keep warm. Call a doctor, giving the substance's exact name. If breathing is irregular or stopped, administer artificial respiration. Never give anything by mouth to an unconscious person or a person with cramps.

Self-protection of the first aider Wear personal protection equipment (see chapter 8). First Aid.

After inhalation

Provide fresh air.

In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray,

Pulmicort-dosage-spray. (Auxiloson 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.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Rub greasy ointment into the skin.

Do not wash with: Solvents/Thinner

If skin becomes irritated, seek medical treatment.

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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. Observe risk of aspiration if vomiting occurs. Do not introduce anything into the mouth of an unconscious person. Risk of aspiration. Potential damage to lungs after vomiting.

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

The following symptoms may occur: Cough, Dyspnoea, Cyanosis (blue coloured blood), Pulmonary oedema, Pneumonia, Acidosis, Central nervous system depression, Headache, Nausea, Drowsiness, Dizziness, Inebriation, unconsciousness.

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

Risk of aspiration. Potential damage to lungs after vomiting.

After ingestion the stomach must be emptied by a doctor using a probe.

Follow-up observations for pneumonia and pulmonary oedema.

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

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

Unsuitable extinguishing media

High power water jet. Water spray jet

5.2. Special hazards arising from the substance or mixture

Fire gives rise to dense black smoke. Carbon dioxide (CO2). Carbon monoxide. hydrocarbons. Gases emitted by burning organic materials must always be classified as respiratory poisons. Burning produces heavy smoke.

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. Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control. 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: DIN EN 469

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes, and clothing. Do not breathe vapour/aerosol. Remove all sources of ignition. Prevent the liquid from escaping. 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. Special danger of slipping by leaking/spilling product.

For non-emergency personnel:

Wear personal protection equipment (see chapter 8).

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For emergency responders

Wear personal protection equipment (see chapter 8). Use personal protective equipment as required. Suitable material: Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter groundwater. Do not allow to enter the soil or 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:

Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Prevent spread over a wide area (e.g. by containment or oil barriers). Remove from the water surface (e.g. skimming, sucking).

For cleaning up:

Methods of cleaning - large amounts of spilled material: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

Methods of cleaning - small amounts of spilled material

Clear spills immediately. Wipe up with absorbent material (eg. cloth, fleece). Wipe up with absorbent material (eg. cloth, fleece). Collect in closed and suitable containers for disposal. Clear contaminated areas thoroughly. Clean with detergents. Solvent use Retain contaminated washing water and dispose it. Ensure all waste water is collected and treated via a waste water treatment plant.

Suitable material for taking up: Sand. Kieselguhr. Universal binder. Absorbing material, organic

Unsuitable material for taking up: none known

6.4. Reference to other sections

Wear personal protection equipment (see chapter 8).

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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!

Re-circulation of exhaust air is not recommended. Always close containers tightly after the removal of product.

Advice on protection against fire and explosion

Measures to prevent fire:

The product is: Flammable

The formation of combustible vapours is possible at temperatures above: +10 °C (Flash point -15°C) Vapours can form potentially explosive mixtures with air. Spray mist may be blammalbe at temperatures below the flash point. 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. Provide earthing of containers, equipment, pumps and ventilation facilities. Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Use only non-sparking tools. Take precautionary measures against static discharge. 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. Never use pressure to empty container. Wear anti-static footwear and clothing

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Further information on handling

Environmental precautions:

Shafts and sewers must be protected from entry of the product. Transfer wash-downs in sealed containers. Provide for retaining containers, eg. floor pan without outflow. 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).

Wear personal protection equipment (see chapter 8). Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500. Observe the general hygiene measures when handling chemical substances. 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.

Store only in original container. Storage temperature: +10-+30°C

Keep away from foodstuffs and fodder.

Advice on storage compatibility

Do not store together with: (Storage class)

1 Explosive hazardous substances

2A Gases

- 4.1 A Other potentially explosive hazardous substances
- 4.1 B Flammable solids
- 4.2 A Pyrophoric or self-heating substances
- 4.3 Hazardous substances that release flammable gases when in contact with water
- 5.1 A Highly oxidising substances
- 5.1 C Ammonium nitrate and preparations containing ammonium nitrate
- 5.2 Organic peroxides and self-reactive substances
- 6.1 B Non-combustible substances of acute toxicity, category 1 and 2 / very toxic substances
- 6.2 Infectious substances
- 7 Radioactive substances

Further information on storage conditions

Keep in well sealed receptacles at a cool, dry location.

Ventilate adequately storage and work rooms.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls

When thresholds are exceeded approved respiratory equipment must be worn.

Protective and hygiene measures

Do not smoke, eat, or drink during work. Do not breathe in vapours.

Eye/face protection

Tightly sealed safety glasses. (EN 166, BGR 192, ZH 1/703)

Hand protection

Wear protective gloves. (EN 374)

Material: NBR (Nitrile rubber). FKM (Fluoroelastomer).

Breakthrough time: 60 min

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Skin protection

Wear protective clothing. (EN 340, BGR 189, ZH 1/700), antistatische Stiefel (EN 344, BGR 191, ZH 1/702))

Respiratory protection

Gas filtrating Half-face mask: FFA EN 405, BGR 190, ZH 1/701 Modell 4251 (FFA1P1/1000ml/m³) 4255 (FFA2P2SL/5000ml/m³)

Half-face mask or Quarter-face mask with gas filter: EN 141, BGR 190, ZH 1/701 Typ 6051(A1/1000ml/m³) 6055 (A2/5000ml/m³)

Full-face mask with gas filter: EN 136, BGR 190, ZH 1/701

TYP A.

Indication colour brown

Environmental exposure controls

Do not let the product enter the groundwater, open water, or the sewerage system.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: white
Odour: characteristic

Test method

Changes in the physical state

Melting point: > 140 °C

Flash point: > 24 °C DIN EN ISO 2719

Lower explosion limits:0,6 vol. %Upper explosion limits:7,0 vol. %Ignition temperature:> 200 °CVapour pressure:5 hPa(at 20 °C)5 hPa

Vapour pressure: 24 hPa

(at 50 °C)

Density (at 20 °C): 0,78 g/cm³ DIN 51757

Water solubility: 0,1 g/L

(at 20 °C)

Solubility in other solvents

mixable with most organic solvent cleaners

Viscosity / kinematic: < 20,5 mm²/s DIN 53015

(at 40 °C)

Flow time: 23 s 3 EN ISO 2431

(at 23 °C)

Evaporation rate: 0,6 n-BuAc=1 ASTM D 3539

(at 20 °C)

SECTION 10: Stability and reactivity

10.1. Reactivity

Stabile under the specified storage conditions.

10.2. Chemical stability

Stabile under the specified storage conditions.

10.3. Possibility of hazardous reactions

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No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

Further information

no decomposition when stored and handled properly

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Preparation not tested.

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
64742-95-6	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified				
	oral	LD50	> 5000 mg/kg	Rat	OECD 401
	dermal	LD50	> 2000 mg/kg	Rabbit	OECD 402
	inhalative (4 h) aerosol	LC50	> 7,63 mg/l	Rat	OECD 403

Additional information on tests

Organic solvent: according to the literature, aliphatic hydrocarbons have a slightly irritant effect on the skin and mucous membranes in addition to their demoisturising and narcotic properties. Direct contact with lung tissue (e.g. through aspiration) may cause pneumonia.

Practical experience

Observations relevant to classification

LD 50/oral rat => 2.000 mg/kg

LD 50/dermal rat => 2.000 mg/kg

LC 50/inhalativ 4h rat => 20 mg/l

Other observations

Has degreasing effect on the skin. Eye contact may cause irritation.

Inhalation of high vapour concentrations can cause narcotic effects and metabolic acidosis. Symptoms of overexposure are dizziness, headaches, fatigue, nausea, unconsciousness, and respiratory arrest. Fast evaporation of liquid can cause frostbite.

SECTION 12: Ecological information

12.1. Toxicity

LC 50/96h/Poecilia reticulata: 10-100 mg/l

EC 50/72h/algae: 10-100 mg/l

EC 50/48h/Daphnia magna: 10-100 mg/l

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CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
64742-95-6	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified					
	Acute fish toxicity	LC50	10 mg/l		Oncorhynchus mykiss (Rainbow trout)	OECD 203
	Acute algae toxicity	ErC50	3,1 mg/l	72 h	Selenastrum capricornutum	OECD 201
	Acute crustacea toxicity	EC50	4,5 mg/l		Daphnia magna (Big water flea)	OECD 202
	Crustacea toxicity	NOEC	2,6 mg/l		Daphnia magna (Big water flea)	OECD 211

12.2. Persistence and degradability

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
64742-95-6	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified				
	OECD 301 F	77,05%	28		
	Readily biodegradable (according to OECD criteria).		•		

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64742-95-6	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified	> 3

BCF

CAS No	Chemical name	BCF	Species	Source
	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified	102500		

12.4. Mobility in soil

The product ist insoluble an floats on water. The product evaporates readily.

12.6. Other adverse effects

Keine Daten verfügbar.

Further information

Do not let the product enter the groundwater, open water, or the sewerage system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Carry out a burning of harzardous waste according to official regulations.

Waste disposal number of waste from residues/unused products

070204 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic

rubber and man-made fibres; other organic solvents, washing liquids and mother liquors

Classified as hazardous waste.

Waste disposal number of used product

070204 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic

rubber and man-made fibres; other organic solvents, washing liquids and mother liquors

Classified as hazardous waste.

Waste disposal number of contaminated packaging

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150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by

hazardous substances

Classified as hazardous waste.

Contaminated packaging

Cleaned containers may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1268

14.2. UN proper shipping name: PETROLEUM PRODUCTS, N.O.S.

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Classification code: F1
Limited quantity: LQ7
Hazard No: 30

Other applicable information (land transport)

: 3 : E

Marine transport (IMDG)

14.1. UN number: UN 1268

14.2. UN proper shipping name: PETROLEUM PRODUCTS, N.O.S.

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Marine pollutant:

Limited quantity:

EmS:

•

5 L

F-E, S-E

Other applicable information (marine transport)

: 223, 944, 955

Air transport (ICAO)

14.1. UN number: UN 1268

14.2. UN proper shipping name: PETROLEUM PRODUCTS, N.O.S.

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



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Limited quantity Passenger:	10 L	

IATA-packing instructions - Passenger:309IATA-max. quantity - Passenger:60 LIATA-packing instructions - Cargo:310IATA-max. quantity - Cargo:220 L

Other applicable information (air transport)

: Y309

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): $(25 \,^{\circ}\text{C}) = 752 \,\text{g/L}.$ 2004/42/EC (VOC): $(25 \,^{\circ}\text{C}) = 752 \,\text{g/L}.$

Subcategory according to Directive

2004/42/EC:

Binding primers - Solvent-borne coatings, VOC limit value: 750 g/l

Additional information

Contains epoxy constituents. See information supplied by the manufacturer.

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water contaminating class (D): 2 - water contaminating

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

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

All information, recommendations, and advice on the part of R&G Faserverbundwerkstoffe GmbH are published to the best of our knowledge and belief. They are noncommittal and contain neither explicit nor tacit assurance or warranty of particular properties. The values specified for properties are typical figures. Recommendations or advice serve to describe our products and possible applications in a general or exemplary, but not specifically individual manner. In the course of the constant technical advancement and improvement of our products there may be changes to the characteristic values, copy, and diagrams; no specific reference is made to any such change. Owing to our products' wide and highly diverse range of potential applications far beyond any of our attempts to analyse, the customer alone is responsible for examining our products' suitability for the respective processes and purposes and their respective processibility. All and any protective rights and the applicable laws, terms, and conditions must be observed by the buyer or user of our products at their own responsibility. Publication is not a licence and does not intend the violation of any patents.

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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.)