

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Release agent Semiperm® Monofilm

Print date: 22.12.2014

Product code: 165103

Page 1 of 10

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

1.1. Product identifier

Release agent Semiperm® Monofilm

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 number: Vergiftungs-Informations-Zentrale Freiburg
Tel: +49 (0)761 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Indications of danger: F - Highly flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment
R phrases:
Highly flammable.
Irritating to skin.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Harmful: may cause lung damage if swallowed.
Repeated exposure may cause skin dryness or cracking.
Vapours may cause drowsiness and dizziness.

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

Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Germ cell mutagenicity: Muta. 1B
Carcinogenicity: Carc. 1B
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Harmful if inhaled.
Causes serious eye irritation.
Causes skin irritation.
May cause drowsiness or dizziness.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Release agent Semiperm® Monofilm

Print date: 22.12.2014

Product code: 165103

Page 2 of 10

Hazardous components which must be listed on the label

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha
 Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified
 Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha
 butanone; ethyl methyl ketone

Signal word:

Danger

Pictograms:

GHS02-GHS07-GHS08-GHS09

**Hazard statements**

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H332	Harmful if inhaled.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

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**

Mixture consisting of the following substances

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Release agent Semiperm® Monofilm

Print date: 22.12.2014

Product code: 165103

Page 3 of 10

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
265-151-9	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha	25 - 50 %
64742-49-0	Carc. Cat. 2, Muta. Cat. 2, Xn - Harmful R45-46-65	
649-328-00-1	Carc. 1B, Muta. 1B, Asp. Tox. 1; H350 H340 H304	
215-535-7	xylene	20 - 25 %
1330-20-7	Xn - Harmful, Xi - Irritant R10-20/21-38	
601-022-00-9	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315	
265-199-0	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified	10-<15%
64742-95-6	Carc. Cat. 2, Muta. Cat. 2, Xn - Harmful R45-46-65	
649-356-00-4	Carc. 1B, Muta. 1B, Asp. Tox. 1; H350 H340 H304	
265-150-3	Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha	10-<15%
64742-48-9	Carc. Cat. 2, Muta. Cat. 2, Xn - Harmful R45-46-65	
649-327-00-6	Carc. 1B, Muta. 1B, Asp. Tox. 1; H350 H340 H304	
201-159-0	butanone; ethyl methyl ketone	5 - 10 %
78-93-3	F - Highly flammable, Xi - Irritant R11-36-66-67	
606-002-00-3	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066	
200-662-2	acetone; propan-2-one; propanone	5 - 10 %
67-64-1	F - Highly flammable, Xi - Irritant R11-36-66-67	
606-001-00-8	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated clothing immediately.

After inhalation

If unconscious, storage and transport in stable lateral position

After contact with skin

Immediately with water and soap and rinse thoroughly. If skin irritation occurs.

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.

After ingestion

Contact a doctor immediately. concerned to keep calm. No heir's lead. Do not give fatty oils and milk.

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

Drowsiness Unconsciousness Headache. vomiting. Dizziness.

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

No information available.

SECTION 5: Firefighting measures

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Release agent Semiperm® Monofilm

Print date: 22.12.2014

Product code: 165103

Page 4 of 10

5.1. Extinguishing media

Suitable extinguishing media

Sand Carbon dioxide (CO₂). Extinguishing powder.

Unsuitable extinguishing media

Full water jet Water

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide.

5.3. Advice for firefighters

Wear a protective full body suit. Wear breathing apparatus with own air supply.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate adequately storage and work rooms. Personal protection equipment Keep unprotected persons at a safe distance.

6.2. Environmental precautions

Notify the responsible authority when the substance enters open water, the soil, or sewerage system. Do not discharge into drains, surface or groundwater.

6.3. Methods and material for containment and cleaning up

Provide adequate ventilation/vapour extraction at the workplace. Take up with absorbent material (e.g. sand, kieselguhr, universal binder). Send in suitable containers for recovery or disposal.

6.4. Reference to other sections

Information for safe handling, see Chapter 7 Information on personal protective equipment see Chapter 8 See Section 13 for disposal information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation/vapour extraction at the workplace. Avoid the formation of aerosol.

Advice on protection against fire and explosion

Vapours can form explosive mixtures with air. Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharge.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Provide a solvent-resistant and sealed floor.

Advice on storage compatibility

Keep away from oxidising agents.

Further information on storage conditions

Heating causes rise in pressure with risk of bursting. Store in a dry place. Keep receptacles tightly sealed. Do not keep the container sealed. Keep in well sealed receptacles at a cool, dry location. Protect against the effects of heat and direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Release agent Semiperm® Monofilm

Print date: 22.12.2014

Product code: 165103

Page 5 of 10

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
		300	899		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
78-93-3	Butan-2-one	butan-2-one	70 µmol/L	urine	Post shift
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol	urine	Post shift

Additional advice on limit values

Based on references valid at the time of compilation.

8.2. Exposure controls**Protective and hygiene measures**

When using do not eat, drink, smoke or take drugs. Keep away from foodstuffs, beverages and feed. Immediately take off soiled, impregnated clothing. Wash hands before breaks and after work. Gases / vapors / aerosols not breathe. Avoid contact with skin.

Eye/face protection

Protective goggles (EN 166)

Hand protection

The glove material has to be impermeable and resistant to the product / the substance / the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and degradation. Material of gloves: The selection of suitable gloves not only the material but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of glove materials can not advance and has therefore to be checked before use. Neoprene gloves. Gloves made of synthetic rubber. The exact Durchbuchzeit is from the protective glove manufacturer to manufacturer.

Skin protection

Wear protective clothing.

Respiratory protection

short-term filter equipment Filter A In case of insufficient ventilation. In case of brief exposure or low pollution use respiratory filter device during intensive or longer exposure use self-contained breathing apparatus. Filter A / P 2

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

Physical state:	liquid
Colour:	off-white
Odour:	characteristic

Test method

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Release agent Semiperm® Monofilm

Print date: 22.12.2014

Product code: 165103

Page 6 of 10

Changes in the physical state

Initial boiling point and boiling range:	80 °C
Flash point:	< 0 °C
Lower explosion limits:	0,6 vol. %
Upper explosion limits:	7,7 vol. %
Ignition temperature:	240 °C
Vapour pressure: (at 20 °C)	61 hPa
Density (at 20 °C):	0,78 g/cm ³
Water solubility:	NICHT LÖSLICH
Solvent content:	95 %

SECTION 10: Stability and reactivity**10.2. Chemical stability**

no decomposition when stored and handled properly

10.3. Possibility of hazardous reactions

No dangerous reaction at use as agreed.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
1330-20-7	xylene				
	oral	LD50	3523 mg/kg	Rat	EU Method B.1
	dermal	LD50	> 4200 mg/kg	Rabbit	
	inhalative (4 h) vapour	LC50	29 mg/l	Rat	EU Method B.2
	inhalative aerosol	ATE	1,5 mg/l		
78-93-3	butanone; ethyl methyl ketone				
	oral	LD50	2740 mg/kg	Rat	
	dermal	LD50	6480 mg/kg	Rabbit	
67-64-1	acetone; propan-2-one; propanone				
	oral	LD50	5800 mg/kg	Rat	IUCLID
	dermal	LD50	> 7426 mg/kg	Rabbit	IUCLID
	inhalative (4 h) vapour	LC50	76 mg/l	Rat	IUCLID

Irritation and corrosivity

Irritates skin and mucous membranes.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Release agent Semiperm® Monofilm

Print date: 22.12.2014

Product code: 165103

Page 7 of 10

Additional information on tests

The product shows the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version: Irritant: irritating

SECTION 12: Ecological information

12.1. Toxicity

No information available.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
1330-20-7	xylene					
	Acute fish toxicity	LC50	2,6 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203
	Acute algae toxicity	ErC50	4.36 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 201
	Acute crustacea toxicity	EC50	1 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202
	Fish toxicity	NOEC	> 1,3 mg/l	56 d	Oncorhynchus mykiss (Rainbow trout)	
	Algae toxicity	NOEC	0,44 mg/l	3 d	Pseudokirchneriella subcapitata	OECD 201
	Crustacea toxicity	NOEC	1,57 mg/l	21 d	Daphnia magna (Big water flea)	OECD 211
78-93-3	butanone; ethyl methyl ketone					
	Acute fish toxicity	LC50	3220 mg/l	96 h		
	Acute crustacea toxicity	EC50	5090 mg/l	48 h		
67-64-1	acetone; propan-2-one; propanone					
	Acute fish toxicity	LC50	5540 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	IUCLID
	Acute crustacea toxicity	EC50	12600 mg/l	48 h	Daphnia magna (Big water flea)	IUCLID
	Crustacea toxicity	NOEC	> 1106 mg/l	28 d	Daphnia magna (Big water flea)	IUCLID
	Acute bacteria toxicity		(61150 mg/l)	1 h	Activated sludge	OECD 209

12.2. Persistence and degradability

No information available.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
1330-20-7	xylene			
	OECD 301 F	87,8%	28	
	Readily biodegradable (according to OECD criteria).			
	OECD 304 A	50%	23	
	Biodegradable.			
67-64-1	acetone; propan-2-one; propanone			
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	90 %	28	IUCLID
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

No information available.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Release agent Semiperm® Monofilm

Print date: 22.12.2014

Product code: 165103

Page 8 of 10

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
78-93-3	butanone; ethyl methyl ketone	0,29
67-64-1	acetone; propan-2-one; propanone	-0,24

BCF

CAS No	Chemical name	BCF	Species	Source
1330-20-7	xylene	25,9	Oncorhynchus mykiss (Rainbow trout)	
67-64-1	acetone; propan-2-one; propanone	3		IUCLID

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

Further information

Toxic for Fish.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

May not be disposed of together with domestic waste. Carry out a burning of hazardous waste according to official regulations.

Contaminated packaging

Contaminated packaging must be completely emptied and can be re-used following appropriate cleaning. Noncleanable packaging must be disposed of like the substance.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

UN 1993

14.2. UN proper shipping name:

FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum)< 0,1 % Benzene, ETHYL METHYLETHYLKETONE)),

14.3. Transport hazard class(es):

3

14.4. Packing group:

II

Hazard label:

3



Classification code:

F1

Special Provisions:

274 601 640C

Limited quantity:

1 L

Transport category:

2

Hazard No:

33

Tunnel restriction code:

D/E

Other applicable information (land transport)

E2

E0

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Release agent Semiperm® Monofilm

Print date: 22.12.2014

Product code: 165103

Page 9 of 10

Marine transport (IMDG)

14.1. UN number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum)< 0,1 % Benzene, ETHYL METHYLETHYLKETONE)),
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Marine pollutant:	Ja
Special Provisions:	274
Limited quantity:	1 L
EmS:	F-E, S-E

Other applicable information (marine transport)

E2

E0

Air transport (ICAO)

14.1. UN number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum)< 0,1 % Benzene, ETHYL METHYLETHYLKETONE)),
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Special Provisions:	A3
Limited quantity Passenger:	1 L
IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

Other applicable information (air transport)

E2

Passenger-LQ: Y341

E0

: Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



SECTION 15: Regulatory information

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Release agent Semiperm® Monofilm

Print date: 22.12.2014

Product code: 165103

Page 10 of 10

National regulatory information

Water contaminating class (D): 2 - water contaminating

SECTION 16: Other information**Relevant R-phrases (Number and full text)**

10	Flammable.
11	Highly flammable.
20/21	Harmful by inhalation and in contact with skin.
36	Irritating to eyes.
38	Irritating to skin.
45	May cause cancer.
46	May cause heritable genetic damage.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

Relevant H- and EUH-phrases (Number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

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