

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Spray Adhesive "Aerofix 2"

Print date: 22.11.2016

Product code: 159100

Page 1 of 9

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

Spray Adhesive "Aerofix 2"

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****Regulation (EC) No. 1272/2008**

Hazard categories:

Flammable liquid: Flam. Liq. 1

Skin corrosion/irritation: Skin 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 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**Regulation (EC) No. 1272/2008****Signal word:** Danger**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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Spray Adhesive "Aerofix 2"

Print date: 22.11.2016

Product code: 159100

Page 2 of 9

Precautionary statements

- | | |
|-----------|--|
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P211 | Do not spray on an open flame or other ignition source. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |

Special labelling of certain mixtures

- | | |
|--------|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
|--------|---|

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Spray Adhesive "Aerofix 2"

Print date: 22.11.2016

Product code: 159100

Page 3 of 9

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
74-98-6	propane			19 - 21 %
	200-827-9	601-003-00-5		
	Flam. Gas 1; H220			
92045-53-9	Naphtha (petroleum), hydrodesulfurized light, dearomatized; Low boiling point naphtha - unspecified			19 - 21 %
	295-434-2	649-383-00-1		
	Carc. 1B, Muta. 1B, Asp. Tox. 1; H350 H340 H304			
115-10-6	dimethyl ether			12 - 14 %
	204-065-8	603-019-00-8		
	Flam. Gas 1; H220			
110-82-7	cyclohexane			11 - 14 %
	203-806-2	601-017-00-1		
	Flam. Liq. 2, Asp. Tox. 1, Skin Irrit. 2, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H225 H304 H315 H336 H400 H410			
109-66-0	pentane			9 - 11 %
	203-692-4	601-006-00-1		
	Flam. Liq. 2, Asp. Tox. 1, STOT SE 3, Aquatic Chronic 2; H225 H304 H336 H411 EUH066			
64742-49-0	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha			10 %
	265-151-9	649-328-00-1	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			6 - 8 %
	203-448-7	601-004-00-0		
	Flam. Gas 1; H220			
75-28-5	isobutane			3 - 6 %
	200-857-2	601-004-00-0		
	Flam. Gas 1; H220			
78-78-4	isopentane; 2-methylbutane			3 - 6 %
	201-142-8	601-085-00-2		
	Flam. Liq. 1, Asp. Tox. 1, STOT SE 3, Aquatic Chronic 2; H224 H304 H336 H411 EUH066			
1317-65-3	Limestone (calcium carbonate - not classified)			3 - 6 %
	215-279-6			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Consult physician if problems persist.

After inhalation

Following inhalation: Move victim to fresh air. Consult physician.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Spray Adhesive "Aerofix 2"

Print date: 22.11.2016

Product code: 159100

Page 4 of 9

After contact with skin

Change contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Consult physician if problems persist.

After contact with eyes

After contact with eye rinse immediately with lot of water at least 5 minutes with open eyelid. Subsequently consult an ophthalmologist. Medical treatment necessary.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Remove affected person from the danger area and lay down. Consult physician. Do not introduce anything into the mouth of an unconscious person.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry extinguishing powder. Foam. Carbon dioxide (CO₂)

Unsuitable extinguishing media

jet of water

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to the escape of irritating gases and vapors. When fire or if heated, a pressure increase will occur and the container may burst.

5.3. Advice for firefighters

Wear breathing apparatus without recirculating air and suitable protective clothing. Personal protection equipment: see section 8

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Evacuate all non-essential personnel. Avoid contact with skin, eyes, and clothing. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow to enter the soil or subsoil.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, kieselguhr, universal binder). Send in suitable containers for recovery or disposal. Absorb with sand, earth, or another absorbent substance.

6.4. Reference to other sections

Personal protective equipment see Section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation/vapour extraction at the workplace.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

The statutory requirements are complied with.

Further information on storage conditions

at room temperature <50 Store in a dry place.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Spray Adhesive "Aerofix 2"

Print date: 22.11.2016

Product code: 159100

Page 5 of 9

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

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
1317-65-3	Calcium carbonate, respirable	-	4		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
110-82-7	Cyclohexane	100	350		TWA (8 h)	WEL
		300	1050		STEL (15 min)	WEL
115-10-6	Dimethyl ether	400	766		TWA (8 h)	WEL
		500	958		STEL (15 min)	WEL
78-78-4	Isopentane	600	1800		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
109-66-0	Pentane	600	1800		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

8.2. Exposure controls**Appropriate engineering controls**

Provide adequate ventilation/vapour extraction at the workplace.

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.

Skin protection

Avoid contact with skin. Wear protective gloves and protective clothing.

Respiratory protection

When thresholds are exceeded approved respiratory equipment must be worn.

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

Physical state:	liquid
Colour:	clear
Odour:	slightly sweetish

Test method**Changes in the physical state**

Flash point:	-42 °C
Density (at 20 °C):	~0.7 g/cm ³
Water solubility:	insoluble

SECTION 10: Stability and reactivity

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Spray Adhesive "Aerofix 2"

Print date: 22.11.2016

Product code: 159100

Page 6 of 9

10.1. Reactivity

No data available

10.2. Chemical stability

stable

10.4. Conditions to avoid

Keep away from heat and ignition sources.

10.5. Incompatible materials

Oxidizing agents. strong acid and alkalis

10.6. Hazardous decomposition products

Carbon dioxide. dioxide

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

Repeated inhalation can lead to permanent disease of the respiratory tract. Contact may cause skin sensitisation. Irritation to skin, eyes, and mucous membranes.

CAS No	Chemical name			
	Exposure route	Dose	Species	Source
115-10-6	dimethyl ether			
	inhalative (4 h) gas	LC50 164000 ppm	Rat	IUCLID
109-66-0	pentane			
	inhalative (4 h) vapour	LC50 364 mg/l	Rat	GESTIS
64742-49-0	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha			
	oral	LD50 > 5840 mg/kg	Rat	
	dermal	LD50 > 2800 mg/kg	Rat	
	inhalative (4 h) vapour	LC50 > 23,3 mg/l	Rat	
106-97-8	butane			
	inhalative (4 h) gas	LC50 658 ppm	Rat	GESTIS

Irritation and corrosivity

Irritation to skin, eyes, and mucous membranes.

Sensitising effects

Contact may cause skin sensitisation.

STOT-repeated exposure

Contact may cause skin sensitisation.

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Spray Adhesive "Aerofix 2"

Print date: 22.11.2016

Product code: 159100

Page 7 of 9

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h] [d]	Species	Source
115-10-6	dimethyl ether				
	Acute fish toxicity	LC50 > 4100 mg/l	96 h	Poecilia reticulata (Guppy)	NEN6504
	Acute crustacea toxicity	EC50 > 4400 mg/l	48 h	Daphnia magna (Big water flea)	NEN6501
109-66-0	pentane				
	Acute crustacea toxicity	EC50 9,74 mg/l	48 h	Daphnia magna	IUCLID
64742-49-0	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha				
	Acute fish toxicity	LC50 > 13,4 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50 10-30 mg/l	72 h	Pseudokirchnerella subcapitata	
	Acute crustacea toxicity	EC50 3 mg/l	48 h	Daphnia magna (Big water flea)	
75-28-5	isobutane				
	Acute fish toxicity	LC50 27,98 mg/l	96 h		US-EPA-(Q)SAR
	Acute algae toxicity	ErC50 7,71 mg/l	96 h		US-EPA-(Q)SAR
	Acute crustacea toxicity	EC50 14,22 mg/l	48 h		US-EPA-(Q)SAR

12.2. Persistence and degradability

unknown

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
115-10-6	dimethyl ether			
	OECD 301D/ EEC 92/69/V, C.4-E	5%	28	
	Not readily biodegradable (according to OECD criteria)			

12.3. Bioaccumulative potential

unknown

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
74-98-6	propane	2,36
115-10-6	dimethyl ether	0,1
109-66-0	pentane	3,39
106-97-8	butane	2,89
75-28-5	isobutane	2,8

12.4. Mobility in soil

evaporates for the most part.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1950

14.2. UN proper shipping name: AEROSOLS

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Spray Adhesive "Aerofix 2"

Print date: 22.11.2016

Product code: 159100

Page 8 of 9

14.3. Transport hazard class(es): 2

14.4. Packing group: -

Hazard label: 2.1



Classification code: 5F
 Special Provisions: 190 327 344 625
 Limited quantity: 1 L
 Excepted quantity: E0
 Transport category: 2
 Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number: UN 1950

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es): 2

14.4. Packing group: -

Hazard label: 2.1



Classification code: 5F
 Special Provisions: 190 327 344 625
 Limited quantity: 1 L
 Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 1950

14.2. UN proper shipping name: AEROSOLS

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)

14.1. UN number: UN 1950

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es): 2.1

14.4. Packing group: -

Hazard label: 2.1



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Spray Adhesive "Aerofix 2"

Print date: 22.11.2016

Product code: 159100

Page 9 of 9

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

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Water contaminating class (D): 3 - highly water contaminating

SECTION 16: Other information**Relevant H and EUH statements (number and full text)**

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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.)