Safety Data Sheet

in accordance with Regulation (EC) No 2020/878

Universal Epoxy Colour Paste Signal white (RAL 9003)

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

1.1. Product identifier

Universal Epoxy Colour Paste Signal white (RAL 9003)

UFI: FN60-UFA2-9WST-GCNF

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

Use of the substance/mixture

For the pigmentation of EP, UP or PU resins and for condensation-curing silicon moulding compounds (cannot be used for addition-curing silicone moulding compounds).

1.3. Details of the supplier of the safety data sheet

Company name: R&G Faserverbundwerkstoffe GmbH
Street: Im Meißel 7 - 13
Place: D-71111 Waldenbuch
Post-office box: 1145
D-71107 Waldenbuch
Telephone: +49-7157-530460 Telefax: +49-7157-530470
E-mail: info@r-g.de
Contact person: Michael Groß
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

GB CLP Regulation

Hazard Statements:
May cause an allergic skin reaction.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

maleic anhydride
Fatty acid, tall oil, compound with oleylamine

Pictograms:

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P302+P352 IF ON SKIN: Wash with plenty of water.
P501 Dispose of contents/container to industrial incineration plant.
P362+P364 Take off contaminated clothing and wash it before reuse.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P280 Wear protective gloves/protective clothing and eye protection/face protection.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

Special labelling of certain mixtures

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe

spray or mist.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
108-31-6	maleic anhydride			< 0,1 %
	203-571-6	607-096-00-9		
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Resp. Sens. 1, Skin Sens. 1A, STOT RE 1; H302 H314 H318 H334 H317 H372 EUH071			
85711-55-3	Fatty acid, tall oil, compound with oleylamine			< 0,1 %
	288-315-1		01-2119974148-28	
	Eye Dam. 1, Skin Sens. 1A, STOT RE 2; H318 H317 H373			

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		
108-31-6	203-571-6	maleic anhydride	< 0,1 %
	dermal: LD50 = 2620 mg/kg; oral: LD50 = 400 mg/kg Skin Sens. 1A; H317: >= 0,001 - 100		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. If unconscious but breathing normally, place in recovery position and seek medical advice.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After contact with skin

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use for cleaning purposes.: Solvent/Thinner.

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. Seek medical advice immediately.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Put victim at rest, cover with a blanket and keep warm.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, Carbon dioxide, Powder, Water spray.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke. Hazardous decomposition products: carbon black. Health hazard. Use appropriate respiratory protection.

5.3. Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Ventilate affected area. Do not breathe dust/fume/gas/mist/vapours/spray.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. 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

Prevent spread over a wide area (e.g. by containment or oil barriers). Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Collect in closed and suitable containers for disposal. Clean with detergents. Avoid solvent cleaners.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. Only use the material in places where open light, fire and other flammable sources can be kept away.
Use explosion-proof electrical equipment. Filling and transfer: Take precautionary measures against static discharges. Provide earthing of containers, equipment, pumps and ventilation facilities. Wear anti-static footwear and clothing Use only antistatically equipped (spark-free) tools.

Avoid contact with skin, eyes, and clothing. Avoid: Inhalation of vapours or spray/mists, Inhalation of dust/particles. When using do not eat, drink, smoke, sniff. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Never use pressure to empty container. Keep/Store only in original container.

Do not allow to enter into surface water or drains.

Advice on protection against fire and explosion

Solvent vapours are heavier than air, spread on the ground and form explosive mixtures with air mixtures.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store in accordance with: Betriebssicherheitsverordnung (BetrSichV)

Hints on joint storage

Keep away from: Strong acid, Strong alkali, Oxidizing agents.

Further information on storage conditions

Follow the instructions for use on the label. Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight. Keep away from sources of ignition - No smoking. Store in a place accessible by authorized persons only. Always close containers tightly after the removal of product.

7.3. Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
108-31-6	Maleic anhydride	-	1		TWA (8 h)	WEL
		-	3		STEL (15 min)	WEL

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.
If handled uncovered, arrangements with local exhaust ventilation have to be used.
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves. Replace when worn! The design of chemical protective gloves must be be selected specifically for the workplace, depending on the concentration and quantity of the hazardous substance. It is recommended to clarify the chemical resistance of the above mentioned protective gloves for special applications with the glove manufacturer. The wearing time limits according to the manufacturer's specifications must be observed.

Suitable material: FKM (fluororubber). Breakthrough time: >480 min.

Protect skin by using skin protective cream. Use protective skin cream before handling the product.

Skin protection

Wear anti-static footwear and clothing (antistatic) Natural fibres (e.g. cotton), heat-resistant synthetic fibres.

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values. Use suitable breathing apparatus.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	signal white (RAL 9003)
Odour:	like: Solvents

Density (at 20 °C): 2,16 g/cm³

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not applicable

Other safety characteristics

Evaporation rate:	not applicable
Solvent separation test:	<3 % (land transport (ADR/RID))
Solvent content:	0,31%
Solid content:	99,96 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Strong acid, Strong alkali, Oxidizing agents.

10.6. Hazardous decomposition products

Nitrogen oxides (NOx), carbon black, Carbon dioxide (CO2), Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
108-31-6	maleic anhydride				
	oral	LD50 400 mg/kg	Rat	GESTIS	
	dermal	LD50 2620 mg/kg	Rabbit	GESTIS	

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (maleic anhydride; Fatty acid, tall oil, compound with oleylamine)

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Practical experience

Following inhalation:
Possible adverse effects on humans and possible symptoms: May cause respiratory irritation. May May cause damage to the liver if inhaled. May cause damage to the kidneys if inhaled. Central nervous system depression.

Following eye contact:
Irritating to eyes. (Reversible)

After skin contact:
May be absorbed through the skin. Frequent and prolonged skin contact may cause skin irritation. Has a degreasing effect on the skin.

after ingestion:
Symptoms: Nausea, vomiting, gastrointestinal complaints

11.2. Information on other hazards

Further information

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

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
108-31-6	maleic anhydride					
	Acute algae toxicity	ErC50 29 mg/l	72 h	Desmodesmus subspicatus	IUCLID	

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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.
Observe regulations when disposing.

Contaminated packaging

Non-contaminated packages may be recycled.
Observe regulations when disposing.

SECTION 14: Transport information

Land transport (ADR/RID)

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

Other applicable information (land transport)

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

Other applicable information (inland waterways transport)

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

Other applicable information (marine transport)

No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

Other applicable information (air transport)

No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Directive 2010/75/EU on industrial emissions: 0,306 % (6,622 g/l)

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2.

Abbreviations and acronyms

Acute Tox: Acute toxicity
Skin Corr: Skin corrosion
Eye Dam: Eye damage
Resp. Sens: Respiratory sensitisation
Skin Sens: Skin sensitisation
STOT RE: Specific target organ toxicity - repeated exposure
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)

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
EUH071	Corrosive to the respiratory tract.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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