

according to 29 CFR 1910.1200(g)

**SIGRAPREG® C W245-TW2/2/AQ-E323/45%**

Print date: 12.09.2021

Product code: OB\_WIL1902149

Revision date: 22.01.2021

**1. Identification****Product identifier**

SIGRAPREG® C W245-TW2/2/AQ-E323/45%

**Recommended use of the chemical and restrictions on use****Use of the substance/mixture**

Material for CFRP-components.

**Details of the supplier of the safety data sheet**

Company name:	SGL epo GmbH	
	Location: Willich	
Street:	Siemensring 24	
Place:	D-47877 Willich	
Telephone:	+49 (0)2154-9238-0	Telefax: +49 (0)2154-9238-44
e-mail:	markus.wezstein@sglcarbon.com	
Contact person:	Dr. Markus Wezstein	Telephone: +49 (0)2154-9238-28
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Internet:	www.sglcarbon.com	
Responsible Department:	Technical Marketing	

**Emergency phone number:**

+49 (0) 89 19240 (Giftnotruf - TU München)  
+49 (0)2154-9238-0  
8:00 - 18:00 Uhr

**2. Hazard(s) identification****Classification of the chemical****Regulation (EC) No. 1272/2008**

Skin corrosion/irritation: Skin Irrit. 2  
Serious eye damage/eye irritation: Eye Irrit. 2  
Respiratory or skin sensitization: Skin Sens. 1  
Hazardous to the aquatic environment: Aquatic Chronic 2

**Label elements****Regulation (EC) No. 1272/2008****Signal word:** Warning**Pictograms:****Hazard statements**

Causes skin irritation  
Causes eye irritation  
May cause an allergic skin reaction  
Harmful to aquatic life with long lasting effects

**Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If on skin: Wash with plenty of water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
Collect spillage.

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**Hazards not otherwise classified**

The product is skin resorptive.

**3. Composition/information on ingredients****Mixtures****Chemical characterization**

Modified epoxy resin in B-stage on aramid, carbon or glass fabric

**Hazardous components**

CAS No	Components	Quantity
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	27 %
25036-25-3	4,4'-Isopropylidenediphenol, polymer with 1-chloro-2,3-epoxypropane MW > 700	11.25 %
150-68-5	monuron (ISO); 3-(4-chlorophenyl)-1,1-dimethylurea	0.9 %
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether	0.45 %

**4. First-aid measures****Description of first aid measures****General information**

Change contaminated clothing. In case of irregular breathing or respiratory arrest provide artificial respiration.

**After inhalation**

Provide fresh air. In case of troubles or persistent symptoms, consult an ophthalmologist.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.

**After contact with eyes**

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

**After ingestion**

Do NOT induce vomiting. Call a physician in any case!

**Most important symptoms and effects, both acute and delayed**

none/none

**Indication of any immediate medical attention and special treatment needed**

none/none

**5. Fire-fighting measures****Extinguishing media****Suitable extinguishing media**Carbon dioxide (CO<sub>2</sub>). Extinguishing powder water spray alcohol resistant foam.**Unsuitable extinguishing media**

High power water jet.

**Specific hazards arising from the chemical**Special exposure hazards arising from the substance itself, combustion products, resulting gases: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide Nitrogen oxides (NO<sub>x</sub>). Hydrogen chloride (HCl). Pyrolysis products, toxic.**Special protective equipment and precautions for fire-fighters**

Protective equipment and precautions for firefighters Wear a self-contained breathing apparatus and chemical protective clothing.

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**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation.

**Environmental precautions**

No special environmental protection measures are necessary. Do not allow to enter into soil/subsoil.

**Methods and material for containment and cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

**Reference to other sections**

none/none

**7. Handling and storage****Precautions for safe handling****Advice on safe handling**

Ensure adequate ventilation of the storage area.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

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

Ensure adequate ventilation of the storage area.

**Further information on storage conditions**

Protect against: heat. Light.

**8. Exposure controls/personal protection****Control parameters****Additional advice on limit values**

To date, no national critical limit values exist.

**Exposure controls****Appropriate engineering controls**

no restriction.

**Protective and hygiene measures**

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Additional protection measures for the hands: Protect skin by using skin protective cream. Avoid contact with skin, eyes and clothes.

**Eye/face protection**

Tightly sealed safety glasses. (DIN EN 166)

**Hand protection**

Butyl caoutchouc (butyl rubber), &gt;120min (EN ISO 374)

**Skin protection**

Only wear fitting, comfortable and clean protective clothing.

**Respiratory protection**

With correct and proper use, and under normal conditions, breathing protection is not required.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

Physical state:	semisolid
Color:	not relevant

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Odor: neutral

**Test method****Changes in the physical state**

Melting point/freezing point: <23 °C  
 Curing temperature of the prepreg:: >80 °C  
 Density (at 20 °C): 1.45 - 1.65 g/cm<sup>3</sup>

**Other information**

Decomposition temperature (°C): &gt; 300 - 350°C ( in air )

**10. Stability and reactivity****Reactivity**

No decomposition if used as intended.

**Chemical stability**

No decomposition if used as intended.

**Possibility of hazardous reactions**

Response: Oxidizing agents. Alkali (lye) Etchant and acids Amines  
 Exothermic polymerization

**Conditions to avoid**

This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment).

**Incompatible materials**

Oxidizing agents.  
 Etchant and acids  
 Alkali (lye)

**Hazardous decomposition products**

Thermal decomposition can lead to the escape of irritating gases and vapors.

**Further information**

No hazardous reaction when handled and stored according to provisions.  
 Keep in a cool place. (< 8°C)

**11. Toxicological information****Information on toxicological effects****Acute toxicity**

CAS No	Components				
	Exposure route	Method	Dose	Species	Source
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)				
	oral	LD50	30000 mg/kg	Rat	
	dermal	LD50	> 2000 mg/kg	Daphnia magna	
150-68-5	monuron (ISO); 3-(4-chlorophenyl)-1,1-dimethylurea				
	oral	ATE	500 mg/kg		
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether				
	dermal	ATE	1100 mg/kg		
	inhalation (0 h) vapour	ATE	11 mg/l		
	inhalation (0 h) aerosol	ATE	1,5 mg/l		

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**Severe effects after repeated or prolonged exposure**

No toxicological data available.

**Carcinogenic/mutagenic/toxic effects for reproduction**

No toxicological data available.

**12. Ecological information****Persistence and degradability**

Product is biodegradable with difficulty.

**Bioaccumulative potential**

not determined

**Mobility in soil**

not determined

**Other adverse effects**

none/none

**Further information**

No negative ecological effects publicized.

Do not allow to enter into soil/subsoil.

**13. Disposal considerations****Waste treatment methods****Disposal recommendations**

Remove according to the regulations.

**Contaminated packaging**

Packaging which cannot be properly cleaned must be disposed of.

Non-contaminated packages may be recycled.

**14. Transport information****Marine transport (IMDG)****UN proper shipping name:**

No dangerous good in sense of these transport regulations.

**Air transport (ICAO-TI/IATA-DGR)****UN proper shipping name:**

No dangerous good in sense of these transport regulations.

**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**Special precautions for user**

none

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

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**15. Regulatory information****U.S. Regulations****National regulatory information**

SARA Section 311/312 Hazards:

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight &lt;= 700) (25068-38-6): Immediate (acute) health hazard

4,4'-Isopropylidenediphenol, polymer with 1-chloro-2,3-epoxypropane MW &gt; 700 (25036-25-3): Immediate (acute) health hazard

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Monuron (150-68-5): Delayed (chronic) health hazard, Immediate (acute) health hazard  
1,4-bis(2,3 epoxypropoxy)butane; butanedioldiglycidyl ether (2425-79-8): Immediate (acute) health hazard  
SARA Section 313 Toxic release inventory:  
Monuron (150-68-5): De minimis limit = 1.0 %, Reportable threshold = Standard

**State Regulations****Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**16. Other information****Changes**

Revision date: 22.01.2021

Revision No: 1,01

This data sheet contains changes from the previous version in section(s): 1,2,3.

**Abbreviations and acronyms**

"A - Alveolengängig; ADR - Accord européen relatif au transport international des marchandises Dangereuses par Route; bw - Body Weight; CAS - Chemical Abstract Service; CSR - Chemical Safety Report; DFG Deutsche Forschungsgemeinschaft; DIN - Deutsche Industrie Norm; DNEL - Derived No Effect Level; E - Einatembar; EAKV - Europäischer Abfallkatalog Verordnung; EC - Effective Concentration; EC - Effect Concentration; European Commission; EINECS - European Inventory of Existing Commercial Chemical Substances; ELINCS - European List of Notified Chemical Substances; EN - Europäische Norm; LC - Lethal Concentration; LD - Lethal Dosis; NOAEL - No Observed Adverse Effect Level; OECD - Organization for Economic Cooperation and Development; PBT - Persistent, Bioaccumulative and Toxic; RE - Repeated Exposure; REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals;"

**Other data**

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.

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