

Safety Data Sheet according to regulation (EC) N°1907/2006, 1272/2008(CLP) & 453/2010
 Date Revised : 31.10.2018 Revision : 11
 Product : **ELECTRIC RESISTOR CEMENT N°78/3**

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product name : **GLASSBOND SAUEREISEN ELECTRIC RESISTOR CEMENT N°78/3**
 REACH notes : Mixture- Substances contained in this product that are not classified as hazardous have been/will be registered for REACH at the appropriate time.

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

Identified use : High temperature adhesive and sealant
 Uses advised against : No other uses

1.3 Details of the supplier of the safety data sheet

Company identification Glassbond (NW) Ltd
 West Side Industrial Estate
 Jackson Street
 St. Helens
 Merseyside WA9 3AT
 United Kingdom

Telephone +44(0)1744 730334
 Fax +44(0)1744 451661
 Email technical@glassbond.co.uk

1.4 Emergency telephone number +44(0)1744 730334
 (GMT, English spoken, Mon-Friday; 08.30-16.30)

SECTION 2: HAZARDS IDENTIFICATION*

2.1 Classification of the mixture: calculation method

2.1.1 Regulation (EC) No. 1272/2008(CLP)

Physical/Chemical NOT CLASSIFIED
 Human health STOT RE 2 (inhalation), Eye damage 1, Skin Irritant 2
 Environmental NOT CLASSIFIED

2.1.2 Directive 1999/45/EC(DPD) Not available

2.2 Label elements According to Regulation (EC) No. 1272/2008(CLP) STOT RE 2



GHS08



GS05

SIGNAL WORD (S)	DANGER		
HAZARD STATEMENT(S)	H373	Causes damage to lungs through prolonged or repeated exposure via inhalation	
	H315	Causes skin irritation.	Cat 2
	H318	Causes serious eye damage	Cat 1
PRECAUTIONARY STATEMENT(S)	P260	Do not breathe dust	
	P280	Wear protective gloves /protective clothing/eye protection/face protection	
	P305 +	IF IN EYES rinse cautiously with water for several minutes. Remove contact	
	P351 +	lenses, if present and easy to do. Continue rinsing	
	P338		
	P310	Immediately call a POISON CENTRE or doctor	

2.3 Other Hazards

PBT : This mixture contains no substances considered as PBT

vPvB: This mixture contains no substances considered as vPvB

2.4 Additional information For full text of H/P phrases see section 16 if not written out in full above.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS***3.1** Substances. (This product is a mixture according to EU legislation.)**3.2** Mixture of inorganic powders

Hazardous ingredient	% w/w	CAS N°	EC N°	REACH N°	CPL EC 1272/2008
Silica powder	40-50	14808-60-7	238-878-4	Exempted	H373: STOT RE 2
Sodium silicate	10-15	1344-09-8	215-687-4	01-2119448725-31	H335 : STOT SE 3 (inhalation) H318: Eye damage 1 H315: Skin Irritant 2

3.3 Additional information

For full text of H/P phrases see section 16 if not written out in full above.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice	Take off contaminated clothing and wash before re-use (P362), take care not to contaminate unaffected areas.
Inhalation	IF INHALED remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
Eyes	IF IN EYES rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305 + P351 + P338) If eye irritation persists: Get medical attention (P337+P313)
Skin	IF ON SKIN wash exposed areas thoroughly after handling (P264) If skin irritation or rash occurs get medical attention (P332+P313)
Ingestion	IF SWALLOWED: Rinse mouth . Do not induce vomiting (P301+P330+P331). Obtain medical attention immediately, show this safety data sheet.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	Eye contact- May cause serious eye damage. (highly alkaline)
Risks	No information available

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	Treat according to symptoms (decontamination, vital functions), no known specific antidote.
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SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media:

Suitable: CO2 or dry chemical spray, water spray may help to reduce the temperature and extinguish flames for surrounding materials.

Unsuitable: High pressure water jet.

5.2 Special hazards arising from the mixture

The powder will not burn but the packaging is combustible.

5.3 Advice for fire fighters

Use full protective clothing and self-contained breathing apparatus.

Further information: The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing media must be disposed of in accordance with official regulation.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, protective equipment and emergency procedures

Use personal protective clothing.

6.2 Environmental Precautions

Prevent contamination of soil, drains and surface waters. Do not discharge contaminated water/ fire-fighting water into drains/ surface water/ groundwater.

6.3 Methods and material for containment and cleaning up

Collect spillage by sweeping or industrial vacuum cleaner. keep in suitable closed container for disposal

6.4 Reference to other sections

For personal protection see section 8 and disposal section 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling Avoid the formation and deposition of dust. Use only outdoors or in a well ventilated area (P271). For PPE see section 8. Wash contaminated clothing before reuse (P363)

Advice on protection against fire and explosion Normal measures for preventive fire protection
 Take precautionary measures against static discharge if using plastic packaging

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Store locked up (P405), under cover, in a well ventilated, cool, dry place and away from direct sunlight or heat.
 Protect from temperatures below : Not applicable
 Protect from temperatures above : 40 °C
 Suitable storage materials : Original containers.
 Higher temperatures and humidity will reduce the shelf life of the product and may cause the powder to form lumps. The powder will also be difficult to mix into a paste. Under normal conditions (21°C) a shelf life of 12 months or more is possible.

7.3 Specific end use(s) As per section 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits: OEL (Occupational Exposure Standard OES)

		mg/m ³	ppm	Note
Silica crystalline	TWA	-	inhalable	(EH40 UK) OES 8 hr
	TWA	0.3	respirable	(EH40 UK)
Silica crystalline	TLV-TWA	0.1	respirable	(ACIGH)
	STEL	-		
Sodium silicate	TWA	2.0		recommended
	TWA	-		
	STEL	-		

8.1.2 Biological limit value Not available

8.1.3 PNECs and DNELs Not available

8.2 Exposure Controls

8.2.1 Appropriate engineering controls: Effective exhaust ventilation system

8.2.2 Personal Protective Equipment:

Eye/face Protection Tightly fitting safety goggles (e.g. EN166)

Skin Protection/ Hand Gloves: Chemical resistant gloves (e.g. EN374) Butyl rubber: 0.7 mm coating thickness. Nitrile rubber: 0.4 mm coating thickness. Check with PPE manufacturer. Replace immediately if signs of degradation are observed.

Other Wear closed work clothing.

Respiratory Protection In the case of insufficient ventilation or severe dusts
 Cartridge: e.g. EN143 Type P-S (check with PPE manufacturer)

Hygiene measures General industrial hygiene practice

8.2.3 Environmental exposure controls

Local exhaust ventilation and take precautionary measures against static discharge.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 information on basic physical and chemical properties

APPEARANCE	Fine powder	COLOUR	Cream
ODOUR	None	ODOUR THRESHOLD ppm	Not Available
pH VALUE	11-12	RELATIVE DENSITY	2.7 g/ml
MELTING POINT/FREEZING PT	Not applicable	SOLUBILITY IN WATER @ 20°C	<15 g/100g
INITIAL BOILING POINT/RANGE	Not applicable	PARTITION COEFFICIENT	Not available
FLASHPOINT °C	Not applicable	(n-octanol/water)	
EVAPORATION RATE	Not applicable	AUTO IGNITION TEMPERATURE	Not available
FLAMMABILITY (SOLID/GAS)	Not applicable	DECOMPOSITION TEMPERATURE °C	Not available
UPPER EXPLOSIVE LIMIT	Not Available	VISCOSITY mPa.s @ 25°C	Not applicable
LOWER EXPLOSIVE LIMIT	Not Available	EXPLOSIVE PROPERTIES	Not available
VAPOUR PRESSURE	Not applicable	OXIDIZING PROPERTIES	Not oxidising
VAPOUR DENSITY (AIR=1)	Not applicable		

9.2 Other information

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical Stability	Stable under recommended storage and handling conditions.
10.3 Possibility of Hazardous reactions	No dangerous reaction known under conditions of normal use
10.4 Conditions to Avoid	No decomposition if stored and applied as directed.
10.5 Incompatible materials	Incompatible with strong acids, alkaline materials, iron containing materials. Aqueous solutions will react with aluminium, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Can react violently if in contact with acids. Can react with sugar residues to form carbon monoxide.
10.6 Hazardous Decomposition Products.	No hazardous decomposition products if stored and handled as prescribed/ indicated.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects of the mixture

Acute toxicity	Contains components that are hazardous by the following routes : skin, eye, inhalation.		
LD ₅₀ ORAL TOXICITY IN RATS	3400	mg/kg	Sodium silicate
LD ₅₀ DERMAL TOXICITY RABBITS	>5000	mg/kg	Sodium silicate
LC ₅₀ INHL TOXICITY IN RATS	>2.06	g/m ³	Sodium silicate
LD ₅₀ DERMAL TOXICITY RABBITS		mg/kg	
LC ₅₀ ORAL TOXICITY IN RATS		mg/kg	
LD ₅₀ DERMAL TOXICITY RATS		mg/kg	

Skin corrosion/ irritation	Irritating
Serious eye damage / irritation	Damaging
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis cause by deposition in the lungs of fine respirable particles of crystalline silica.

Reproductive toxicity

Not classified

Specific Target Organ Toxicity (Repeated Exposure)

STOT RE2

Specific Target Organ Toxicity (Single Exposure)

Not classified

Aspiration hazard

Not classified

11.2 Other information

In 1997, IARC (International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

			sodium silicate		
LL ₅₀	Fish	(96 hr)	1108	mg/l	Brachydanio rerio
EC ₅₀	Invertebrates	(48 hr)	1700	mg/l	Daphnia magna
EL ₅₀	Algae	(72hr)	Not available	mg/l	Selenastrum capricornutum
LL ₅₀	Fish	(96 hr)		mg/l	Lepomis macrochirus
EC ₅₀	Invertebrates	(48 hr)		mg/l	Daphnia magna
EL ₅₀	Algae	(72hr)		mg/l	Selenastrum capricornutum

Micro organisms/ effect upon activated sludge

EC ₅₀	Bacteria	(3.0 hr)		mg/l	Activated sludge, domestic
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12.2 Persistence and degradability

Not biodegradeable

12.3 Bioaccumulative potential

Not available

12.4 Mobility in soil

Sinks in water. A proportion (<15%) is water soluble. If the product enters soil, it will be mobile and may contaminate groundwater.

12.5 Results of PBT and vPvB assessment

PBT : This mixture contains no substances considered as PBT

vPvB: This mixture contains no substances considered as vPvB

12.6 Other adverse effects

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. Do not release untreated into natural waters. This product has not been tested. The statement has been derived from products of a similar structure and composition.

SECTION 13: DISPOSAL CONSIDERATION

13.1 Waste treatment methods

Dispose of contents/ container according to the end user disposal procedure (P501).
Dispose by landfill via a licensed waste disposal contractor in accordance with local and national regulations.

Contaminated packaging should be emptied as far as possible, they can then be recycled after being thoroughly cleaned by a licensed contractor. Labels must not be removed from containers until they have been cleaned. Packaging materials that are not contaminated should be treated as household waste or as recycling material.

13.2 Additional information

The UK Environmental Protection (Duty of Care) regulations (EP) and amendments should be noted (United Kingdom)

SECTION 14: TRANSPORT INFORMATION

14.1 UN number NOT CLASSIFIED
ADR
RID
IMDG
IATA
ADN

14.2 Proper shipping name NOT CLASSIFIED
ADR
RID
IMDG
IATA
ADN

14.3 Transport Hazard Class NOT CLASSIFIED
ADR
RID
IMDG
IATA
ADN

14.4 Packing Group NOT CLASSIFIED
ADR
RID
IMDG
IATA
ADN

14.5 Environmental hazards NOT CLASSIFIED
ADR
RID
IMDG
IATA
ADN

14.6 Special Precautions for user

Not classified as dangerous in the meaning of transport regulations

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
Not applicable

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the mixture**

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/193 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Employment restrictions: Observe employment restrictions for young people, for child bearing mothers/ nursing and for women of child-bearing age.

15.2 Chemical Safety Assessment

Assessed to be not PBT/vPvB. No risk management measures as defined by REACH have been identified.

SECTION 16: OTHER INFORMATION *

SECTIONS REVISED	7, 10	Supersedes date	05.09.2018
Grade name amendment.			

Legend

PBT	Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative

Data sources	Supplier information
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Other hazard and risk phrases listed in this MSDS

H335	May cause respiratory irritation
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Training advice	General industrial hygiene practice. Do not eat, drink or smoke when using this product (P270)
	Manual handling

Further information

This information relates only to the specific material designated and is to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness and without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry tests to establish the suitability of any products for their intended applications. No statements shall be incorporated in any contract unless expressly agreed in writing or construed as recommending the use of any product in conflict of any patent. All goods are supplied subject to Glassbond Ltd's General Conditions of Sale.