Safety Data Sheet according to regulation (EC) N°1907/2006, 1272/2008(CLP) & 453/2010
Date Revised : 03.06.2014 Revision : 4
Product : **GLASSBOND K11/M**

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

1.1 Product Identifier

Product name : **GLASSBOND K11/M**
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 : Lamp capping adhesive
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 May cause an allergic skin reaction. Skin Sens. 1
Environmental NOT CLASSIFIED

2.1.2 Directive 1999/45/EC(DPD)

R43 Xi- Irritant May cause sensitisation by skin contact.

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

GHS07

SIGNAL WORD (S)		WARNING
HAZARD STATEMENT(S)	H317	May cause an allergic skin reaction. Skin Sens. 1
PRECAUTIONARY STATEMENT(S)	P261 P302+P352 P321	Avoid breathing dust/fume IF ON SKIN: Wash with plenty of soap and water. Specific treatment (avoid skin contact)

2.3 Other Hazards

Code EUH208 'Contains colophony. May produce an allergic reaction.

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 organic resins and inorganic powders

Hazardous ingredient	% w/w	CAS N°	EC N°	REACH N°	CPL EC 1272/2008
Rosin	6-8	8050-09-7	232-475-7	01-2119480418-32-0004	H317 - May cause an allergic skin reaction. Skin Sens. 1
Hexamine	2-3	100-97-0	202-905-8	Not available	H228: Flammable solid. H317: May cause an allergic skin reaction.

Hazardous ingredient	% w/w	CAS N°	EC N°	REACH N°	EU (67/548/EC)
Rosin	6-8	8050-09-7	232-475-7 Not available	01-2119480418-32-0004	Irritant R43
Hexamine	2-3	100-97-0	202-905-8	Not available	Flammable, Irritant R11, 43

3.3 Additional information

For full text of R/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	Immediately remove contaminated clothing, take care not to contaminate unaffected areas.
Inhalation	Contains component irritating by inhalation. Move the exposed person to fresh air. Seek medical attention.
Eyes	Rinse immediately with running water for at least 15 minutes holding the eyelid open; consult an eye specialist.
Skin	Wash thoroughly with water and soap If skin irritation or rash occurs get medical attention (P333+P313)
Ingestion	Immediately rinse the mouth with water and drink plenty of water. 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 temporary eye irritation.
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.

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.
Unsuitable: High pressure water jet.

5.2 Special hazards arising from the mixture

Harmful vapours. Thermal decomposition or burning may release toxic oxides of nitrogen and other toxic gases.

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. Ensure thorough ventilation of stores and work areas. For PPE see section 8 Contaminated clothing should not be allowed out of the workplace (P272).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

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. The powder should be stored 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 : 35 °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 (21ºC) 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
Dust	TWA	10	inhalable	(EH40 UK) OES 8 hr
	STEL	4	respirable	(EH40 UK)
	TWA			(EH40 UK)
	STEL			(EH40 UK)
	TWA			(EH40 UK)
	STEL			(EH40 UK)

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

No special environmental precautions required

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	Not available	RELATIVE DENSITY	1.5 g/ml
MELTING POINT/FREEZING PT	Not applicable	SOLUBILITY IN WATER	<5 % soluble
INITIAL BOILING POINT/RANGE	Not applicable	PARTITION COEFFICIENT (n-octanol/water)	Not available
FLASHPOINT °C	Not applicable		
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

Partially soluble in alcohols

SECTION 10 : STABILITY AND REACTIVITY

10.1	**Reactivity**	Stable under normal conditions. Risk of dust explosion.
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**	Acids, strong oxidising agents
10.6	**Hazardous Decomposition Products.**	No hazardous decomposition products if stored and handled as prescribed/ indicated. Fire creates oxides of carbon and nitrogen, formaldehyde.

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 and ingestion.

LD_{50} ORAL TOXICITY RATS	9200	mg/kg	Hexamine
LD_{50} DERMAL TOXICITY RATS	2000	ml/kg	Hexamine
LC_{50} INHL TOXICITY IN RATS	7600	mg/kg	Rosin
LD_{50} ORAL TOXICITY RATS	>2800	mg/kg	Rosin
LD_{50} DERMAL TOXICITY RABBITS	>2000	mg/kg	Rosin
LC_{50} INHL TOXICITY IN RATS		mg/kg	

Skin corrosion/ irritation	Irritating
Serious eye damage / irritation	Irritating
Respiratory or skin sensitisation	The product contains Hexamine and rosin which are skin sensitising. Materials of this type are known to cause respiratory allergy in people.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

Reproductive toxicity	Not classified
STOT SE (SINGLE exposure)	Not classified
STOT RE (REPEATED exposure)	Not classified
Aspiration hazard	Not classified

11.2 Other information

Skin sensitisation might occur in people with hypersensitive skin.

SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity

LL_{50}	Fish	(96 hr)	<10 (rosin)	mg/l	
EC_{50}	Invertibrates	(48 hr)		mg/l	Daphnia magna
EL_{50}	Algae	(72hr)	>1000 (rosin)	mg/l	Selenastrum capricornutum
LL_{50}	Fish	(96 hr)	41000 (hexamine)	mg/l	Lepomis macrochirus
EC_{50}	Invertibrates	(48 hr)	36000 (hexamine)	mg/l	Daphnia magna
EL_{50}	Algae	(72hr)		mg/l	Selenastrum capricornutum

Micro organisms/ effect upon activated sludge

EC_{50}	Bacteria	(3.0 hr)	>10000(rosin)	mg/l	Activated sludge, domestic

12.2 Persistance and degradability Organic components are not readily biodegradable.

12.3 Bioaccumulative potential Not available

12.4 Mobility in soil Sinks in water. A small percentage (<1%) 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

The preparation must be disposed of by special means. Dispose by incineration or 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)
Dispose of contents/ container according to the end user disposal procedure (P501)

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 *793193* 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.

SECTION 16 : OTHER INFORMATION

* SECTIONS REVISED	1-16	Supercedes date	17.07.2009

The Safety Data Sheets have been revised throughout in accordance with CLP/GHS requirements

Legend

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

Data sources	Supplier information

Other hazard and risk phrases listed in this MSDS

H228	Flammable solid.
H317	May cause an allergic skin reaction.
R 11	Highly flammable
R 43	May cause sensitisation by inhalation and skin contact
Training advice	General industrial hygiene practice. 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 it's 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 expressively 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.