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1 Identification of the substance/preparation and of the company/undertaking

- · Product details
- · Trade name:Glas Keramiek
- · Application of the substance / the preparation: Glass sealing
- · Manufacturer/Supplier

Bionic Technology BV

Bikkershorn 3

9678 RH Westerlee Niederland

Tel: 0031.65101 4323

- · Further information obtainable from: Abteilung Produktsicherheit
- · Information in case of emergency:

Beratungsstelle für Vergiftungserscheinungen und Embryonaltoxikologie, Berlin

Tel.: 0049/030/19240

2 Hazards identification

· Hazard description:





Xi Irritant

F Highly flammable

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 11 Highly flammable.

R 36 Irritating to eyes.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· GHS label elements



Danger

H225 - Highly flammable liquid and vapour.



Warning

H319 - Causes serious eye irritation.

· Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

· Disposal:

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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3 Composition/information on ingredients

- · Chemical characterization
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:			
CAS: 64-17-5	ethanol	b F; R 11	50-100%
EINECS: 200-578-6		Danger: 🚸 2.6/2	
CAS: 67-63-0	propan-2-ol	🗶 Xi, 🔥 F; R 11-36-67	10-25%
EINECS: 200-661-7		Danger: 🚸 2.6/2	
		<i>Warning:</i> (!) 3.3/2, 3.8/3	
CAS: 7664-93-9	sulphuric acid	C; R 35	2.5-10%
EINECS: 231-639-5		Danger: < 3.2/1A	

[·] Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.

5 Fire-fighting measures

· Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Protective equipment: No special measures required.

6 Accidental release measures

- · Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
- · Measures for environmental protection:

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

· Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

7 Handling and storage

- · Handling:
- · Information for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.

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· Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· Ingredients with limit values that require monitoring at the workplace:

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

67-63-0 propan-2-ol

WEL Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm

· Additional information: The lists valid during the making were used as basis.

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:



Protective gloves

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· General Information

Form: Fluid

Colour: According to product specification

Odour: Characteristic

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· Change in condition Melting point/Melting range: Boiling point/Boiling range:		
· Flash point:	≤ 21°C	
· Ignition temperature:	425°C	
· Self-igniting:	Product is not selfigniting.	
· Danger of explosion:	Product is not explosive. However, formation of explosive air vapour mixtures are possible.	
· Explosion limits: Lower: Upper:	2.0 Vol % 15.0 Vol %	
· Vapour pressure at 20°C:	59 hPa	
· Density at 20°C:	0.821 g/cm ³	
· Solubility in / Miscibility with water:	Fully miscible.	
· Solvent content: Organic solvents: VOC (EC)	97.0 % 97.00 %	
Solids content:	3.0 %	

10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- · Materials to be avoided:
- $\cdot \textbf{\textit{Dangerous reactions}} \ \textit{No dangerous reactions known}.$
- · Dangerous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

12 Ecological information

- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

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Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- · Product:
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

07 01 04* other organic solvents, washing liquids and mother liquors

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

· Land transport ADR/RID (cross-border)





· ADR/RID class: 3 (FC) Flammable liquids.

Danger code (Kemler): 338
UN-Number: 2924
Packaging group: II
Hazard label: 3+8

· Description of goods: 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ETHANOL (ETHYL

ALCOHOL), SULPHURIC ACID)

· Maritime transport IMDG:





· IMDG Class: 3
· UN Number: 2924
· Label 3+8
· Packaging group: II
· EMS Number: F-E,S-C
· Marine pollutant: No

· Proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ETHANOL (ETHYL

ALCOHOL), SULPHURIC ACID)

· Air transport ICAO-TI and IATA-DGR:





· ICAO/IATA Class: 3 *· UN/ID Number:* 2924

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· Label 3+8 · Packaging group: II

· Proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ETHANOL, SULPHURIC

ACID)

· UN "Model Regulation": UN2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S., 3 (8), II

15 Regulatory information

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:

Xi Irritant

F Highly flammable

· Risk phrases:

11 Highly flammable.

36 Irritating to eyes.

· Safety phrases:

- 2 Keep out of the reach of children.
- 9 Keep container in a well-ventilated place.
- 16 Keep away from sources of ignition No smoking.
- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 24/25 Avoid contact with skin and eyes.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant R-phrases

- 11 Highly flammable.
- 35 Causes severe burns.
- 36 Irritating to eyes.
- 67 Vapours may cause drowsiness and dizziness.
- · Department issuing MSDS: Abteilung Produktsicherheit
- · Contact: Herr Dr. Bruder
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)