

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

<b>1.1 Product identifier</b>	
Trade name	<b>Agarose beads 6% B-CL (Cross-linked)</b>
Stock number:	F32568
CAS Number:	62610-50-8
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against.</b>	
Identified use:	SU24 Scientific research and development
<b>1.3 Details of the supplier of the safety data sheet</b>	
Manufacturer/Supplier:	Alfa Aesar GmbH & Co.KG A Johnson Matthey Company Zeppelinstr. 7b 76185 Karlsruhe / Germany Tel: +49 (0) 721 84007 280 Fax: +49 (0) 721 84007 300 Email: tech@alfa.com www.alfa.com
Informing department:	Product safety Tel + +049 (0) 7275 988687-0
<b>1.4 Emergency telephone number:</b>	Carechem 24: +44 (0) 1235 239 670 (Multi-language emergency number) Poison Information Center Mainz www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**  
Classification according to Regulation (EC) No 1272/2008

GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

R10: Flammable.

**Information concerning particular hazards for human and environment:**  
**Other hazards that do not result in classification**

Not applicable

No information known.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008****Hazard pictograms****Signal word****Hazard statements****Precautionary statements**

The substance is classified and labelled according to the CLP regulation.

GHS02

Warning

H226 Flammable liquid and vapour.

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.

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

P403+P235

Store in a well-ventilated place. Keep cool.

P501

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

**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:**

Not applicable.

**vPvB:**

Not applicable.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

CAS# Designation: 62610-50-8 Agarose beads 6% B-CL (Cross-linked)

**SECTION 4: First aid measures****4.1 Description of first aid measures****After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

**After skin contact**

Seek immediate medical advice.

Instantly wash with water and soap and rinse thoroughly.

**After eye contact**

Seek immediate medical advice.

**After swallowing**

Rinse opened eye for several minutes under running water. Then consult doctor.

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

Seek medical treatment.

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

No further relevant information available.

No further relevant information available.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents**

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

**5.2 Special hazards arising from the substance or mixture**If this product is involved in a fire, the following can be released:  
Carbon monoxide and carbon dioxide**5.3 Advice for firefighters****Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

**6.2 Environmental precautions:**

Do not allow material to be released to the environment without proper governmental permits.

Do not allow product to reach sewage system or water bodies.

Do not allow to enter the ground/soil.

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

Keep away from ignition sources.

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

Keep away from ignition sources.

**Prevention of secondary hazards:**

See Section 7 for information on safe handling

**6.4 Reference to other sections**

See section 8 for information on personal protection equipment.

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See Section 13 for information on disposal.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Keep containers tightly sealed.  
Ensure good ventilation/exhaustion at the workplace.

**Information about protection against explosions and fires:**

Protect against electrostatic charges.  
Fumes can combine with air to form an explosive mixture.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage**  
**Requirements to be met by storerooms and containers:**  
**Information about storage in one common storage facility:**

Refrigerate  
Water reacts with many metals to give hydrogen, often violently. Water also reacts violently with many reactive organic and inorganic chemicals.  
Protect from heat.

**Further information about storage conditions:**

Keep container tightly sealed.  
Refrigerate

**7.3 Specific end use(s)**

No further relevant information available.

**SECTION 8: Exposure controls/personal protection****Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

**8.1 Control parameters****Components with critical values that require monitoring at the workplace:**

Ethyl alcohol  
ppm  
ACGIH TLV 1000-STEL; Confirmed animal carcinogen with unknown relevance to humans.  
Austria MAK 1000  
Belgium TWA 1000  
Denmark TWA 1000  
Finland TWA 1000; 1250-STEL  
France VME 1000; 5000-VLE  
Germany MAK 1000  
Hungary TWA 1000; 3000-STEL  
Korea TLV 1000; Not classifiable as a human carcinogen  
Netherlands MAC-TGG 500  
Norway TWA 500  
Poland TWA 1000 mg/m<sup>3</sup>; 300 mg/m<sup>3</sup>-STEL  
Russia 1000 mg/m<sup>3</sup>-STEL  
Sweden NGV 500; 1000-KTV  
Switzerland MAK-W 1000  
United Kingdom TWA 1000  
OSHA PEL 1000  
No data

**Additional information:****8.2 Exposure controls****Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.  
Keep away from foodstuffs, beverages and food.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Maintain an ergonomically appropriate working environment.  
Use breathing protection with high concentrations.

**Breathing equipment:****Protection of hands:**

Check protective gloves prior to each use for their proper condition.  
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.

**Material of gloves****Penetration time of glove material****Eye protection:**

Impervious gloves  
Not determined  
Safety glasses

**Body protection:**

Face protection  
Protective work clothing.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Form: Suspension  
Colour: White  
Smell: Not determined  
Odour threshold: Not determined.

pH-value: Not determined.

**Change in condition**

Melting point/Melting range: Not determined  
Boiling point/Boiling range: 100 °C  
Sublimation temperature / start: Not determined

Flash point: 38 °C  
Inflammability (solid, gaseous): Not determined.  
Ignition temperature: Not determined  
Decomposition temperature: Not determined  
Self-inflammability: Not determined.

**Critical values for explosion:**

Lower: Not determined  
Upper: Not determined  
Steam pressure: Not determined  
Density at 20 °C: 1,04 g/cm<sup>3</sup>  
Relative density: Not determined.  
Vapour density: Not determined.  
Evaporation rate: Not determined.

**Solubility in / Miscibility with**

Water: Not miscible or difficult to mix

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<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Viscosity:</b>	
dynamic:	Not determined.
kinematic:	Not determined.
<b>9.2 Other information</b>	No further relevant information available.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	No information known.
<b>10.2 Chemical stability</b>	Stable under recommended storage conditions.
<b>Thermal decomposition / conditions to be avoided:</b>	No decomposition if used and stored according to specifications.
<b>10.3 Possibility of hazardous reactions</b>	Water reacts violently with alkali metals. Reacts with alkaline earth metals
<b>10.5 Incompatible materials:</b>	Heat Water reacts with many metals to give hydrogen, often violently. Water is also incompatible with many reactive organic and inorganic chemicals.
<b>10.6 Hazardous decomposition products:</b>	Carbon monoxide and carbon dioxide

**SECTION 11: Toxicological information**

<b>11.1 Information on toxicological effects</b>	
<b>Acute toxicity:</b>	No effects known.
<b>LD/LC50 values that are relevant for classification:</b>	Ethanol (CAS# 64-17-5) ORL-RAT LD50: 7060 MG/KG ORL-MUS LD50: 3450 MG/KG IHL-RAT LC50: 20000 PPM/10H
<b>Skin irritation or corrosion:</b>	May cause irritation
<b>Eye irritation or corrosion:</b>	May cause irritation
<b>Sensitization:</b>	No sensitizing effect known.
<b>Germ cell mutagenicity:</b>	No effects known.
<b>Carcinogenicity:</b>	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
<b>Reproductive toxicity:</b>	No effects known.
<b>Specific target organ system toxicity - repeated exposure:</b>	No effects known.
<b>Specific target organ system toxicity - single exposure:</b>	No effects known.
<b>Aspiration hazard:</b>	No effects known.
<b>Additional toxicological information:</b>	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

**SECTION 12: Ecological information**

<b>12.1 Toxicity</b>	
<b>Aquatic toxicity:</b>	No further relevant information available.
<b>12.2 Persistence and degradability</b>	No further relevant information available.
<b>12.3 Bioaccumulative potential</b>	No further relevant information available.
<b>12.4 Mobility in soil</b>	No further relevant information available.
<b>Additional ecological information:</b>	
<b>General notes:</b>	Do not allow material to be released to the environment without proper governmental permits. Generally not hazardous for water. Avoid transfer into the environment.
<b>12.5 Results of PBT and vPvB assessment</b>	
<b>PBT:</b>	Not applicable.
<b>vPvB:</b>	Not applicable.
<b>12.6 Other adverse effects</b>	No further relevant information available.

**SECTION 13: Disposal considerations**

<b>13.1 Waste treatment methods</b>	
<b>Recommendation</b>	Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.
<b>Uncleaned packagings:</b>	
<b>Recommendation:</b>	Disposal must be made according to official regulations.

**SECTION 14: Transport information**

<b>UN-Number</b>	UN1170
<b>ADR, IMDG, IATA</b>	
<b>14.2 UN proper shipping name</b>	1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
<b>ADR</b>	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
<b>IMDG</b>	ETHANOL SOLUTION
<b>IATA</b>	
<b>14.3 Transport hazard class(es)</b>	
<b>ADR</b>	
	
<b>Class</b>	3 (F1) Flammable liquids.
<b>Label</b>	3
<b>IMDG, IATA</b>	
	
<b>Class</b>	3 Flammable liquids.
<b>Label</b>	3
<b>Packing group</b>	III
<b>ADR, IMDG, IATA</b>	
<b>14.5 Environmental hazards:</b>	Not applicable.
<b>14.6 Special precautions for user</b>	Warning: Flammable liquids.

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**Safety data sheet**  
according to 1907/2006/EC, Article 31

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**Kemler Number:** 30  
**EMS Number:** F-E,S-D

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

**Transport/Additional information:**

**ADR**  
**Excepted quantities (EQ):** E1  
**Limited quantities (LQ)** 5L  
**Transport category** 3  
**Tunnel restriction code** D/E

**UN "Model Regulation":** UN1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Australian Inventory of Chemical

**Substances** Substance is not listed.

**Standard for the Uniform Scheduling of Drugs and Poisons** Substance is not listed.

National regulations

**Information about limitation of use:** For use only by technically qualified individuals.

**Water hazard class:** Generally not hazardous for water.

**Other regulations, limitations and prohibitive regulations**

ELINCS (European List of Notified Chemical

**Substances)** Substance is not listed.

**Substances of very high concern (SVHC)** Substance is not listed.

**according to REACH, Article 57** Substance is not listed.

**REACH - Pre-registered substances** Substance is not listed.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing data specification sheet:** Health, Safety and Environmental Department.

**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
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)  
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  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

DE/E