

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.07.2013

Revision: 09.05.2013

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name

**Fibronectin, bovine plasma**

Stock number:

J62380

**1.2 Relevant identified uses of the substance**

or mixture and uses advised against.

Identified use:

No further relevant information available.  
SU24 Scientific research and development**1.3 Details of the supplier of the safety data sheet**

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

1.4 Emergency telephone number:

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

The product is not classified as hazardous to health or the environment according to the CLP regulation.

Classification according to Directive 67/548/

EEC or Directive 1999/45/EC

Information concerning particular hazards

for human and environment:

Not applicable

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Other hazards that do not result in classification

No information known.

**2.2 Label elements**

Labelling according to Regulation (EC) No

1272/2008

Hazard pictograms

Not applicable

Signal word

Not applicable

Hazard statements

Not applicable

**2.3 Other hazards**

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

Dangerous components:

Not applicable

Additional information

None known.

**Non-Hazardous Ingredients**

|                                     |   |        |
|-------------------------------------|---|--------|
| CAS: 1185-53-1<br>EINECS: 214-684-5 | Tris(hydroxymethyl)aminomethane hydrochloride | 84,11% |
| CAS: 56-40-6<br>EINECS: 200-272-2   | Glycine                                       | 8,0%   |
| CAS: 7647-14-5<br>EINECS: 231-598-3 | Sodium chloride                               | 7,79%  |
|                                     | Fibronectin                                   | 0,1%   |

**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.

After eye contact

Instantly wash with water and soap and rinse thoroughly.

After swallowing

Seek immediate medical advice.

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

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

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

Seek medical treatment.

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

Sodium oxide

Nitrogen oxides (NOx)

Hydrogen chloride (HCl)

Additional decomposition products are unknown.

**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.

**6.2 Environmental precautions:**

Ensure adequate ventilation

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:**

Collect mechanically.

**Prevention of secondary hazards:**

No special measures required.

**6.4 Reference to other sections**

See Section 7 for information on safe handling

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See section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

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**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**  
**Information about protection against explosions and fires:**

Keep containers tightly sealed.  
No information known.

**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:**

Store in freezer (-20°C).  
Protect from heat.  
Store away from oxidizing agents.

**Further information about storage conditions:**

Store in freezer (-20°C).  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed containers.  
No further relevant information available.

**7.3 Specific end use(s)**

**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:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.  
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.  
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.

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

Impervious gloves  
Not determined  
Safety glasses  
Protective work clothing.

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

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**General Information**

**Appearance:**

**Form:** Powder  
**Colour:** White  
**Smell:** Not determined  
**Odour threshold:** Not determined.

**pH-value:** Not applicable.

**Change in condition**

**Melting point/Melting range:** Not determined  
**Boiling point/Boiling range:** Not determined  
**Sublimation temperature / start:** Not determined  
**Inflammability (solid, gaseous)** Not determined.  
**Ignition temperature:** Not determined  
**Decomposition temperature:** Not determined  
**Self-inflammability:** Product is not selfigniting.

**Critical values for explosion:**

**Lower:** Not determined  
**Upper:** Not determined  
**Steam pressure:** Not applicable.  
**Density** Not determined  
**Relative density** Not determined.  
**Vapour density** Not applicable.  
**Evaporation rate** Not applicable.

**Solubility in / Miscibility with**

**Water:** Soluble  
**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**  
**dynamic:** Not applicable.  
**kinematic:** Not applicable.

**Solvent content:**

**Organic solvents:** 0,0 %

**Solids content:** 100,0 %

**9.2 Other information** No further relevant information available.

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

**10.2 Chemical stability**

**Thermal decomposition / conditions to be avoided:**

**10.3 Possibility of hazardous reactions**

**10.5 Incompatible materials:**

No information known.  
Stable under recommended storage conditions.  
No decomposition if used and stored according to specifications.  
Reacts with strong oxidizing agents  
Oxidizing agents  
Heat  
Carbon monoxide and carbon dioxide  
Sodium oxide

**10.6 Hazardous decomposition products:**

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Nitrogen oxides (NOx)  
Hydrogen chloride (HCl)  
Additional decomposition products are unknown.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity:**

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product.

**LD/LC50 values that are relevant for classification:**

No data

**Skin irritation or corrosion:**

May cause irritation

**Eye irritation or corrosion:**

May cause irritation

**Sensitization:**

No sensitizing effect known.

**Germ cell mutagenicity:**

The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for components in this product.

**Carcinogenicity:**

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

**Reproductive toxicity:**

The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for components in this product.

**Specific target organ system toxicity - repeated exposure:**

No effects known.

**Specific target organ system toxicity - single exposure:**

No effects known.

**Aspiration hazard:**

No effects known.

**Experience with humans:**

The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for components in this product.

**Additional toxicological information:**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:**

No further relevant information available.

**12.2 Persistence and degradability**

No further relevant information available.

**12.3 Bioaccumulative potential**

No further relevant information available.

**12.4 Mobility in soil**

No further relevant information available.

**Additional ecological information:****General notes:**

Do not allow material to be released to the environment without proper governmental permits.  
Water hazard class 1 (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.  
Avoid transfer into the environment.

**12.5 Results of PBT and vPvB assessment****PBT:**

Not applicable.

**vPvB:**

Not applicable.

**12.6 Other adverse effects**

No further relevant information available.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation**

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.

**Uncleaned packagings:****Recommendation:**

Disposal must be made according to official regulations.

**Recommended cleaning agent:**

Water, if necessary with cleaning agent.

**SECTION 14: Transport information****UN-Number****ADR, ADN, IMDG, IATA**

Not applicable

**14.2 UN proper shipping name****ADR, ADN, IMDG, IATA**

Not applicable

**14.3 Transport hazard class(es)****ADR, ADN, IMDG, IATA****Class**

Not applicable

**Packing group****ADR, IMDG, IATA**

Not applicable

**14.5 Environmental hazards:****Marine pollutant:**

No

**14.6 Special precautions for user**

Not applicable.

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC****Code**

Not applicable.

**UN "Model Regulation":**

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

1185-53-1 Tris(hydroxymethyl)aminomethane hydrochloride

56-40-6 Glycine

7647-14-5 Sodium chloride

**Standard for the Uniform Scheduling of Drugs and Poisons**

None of the ingredients is listed.

**National regulations****Information about limitation of use:**

For use only by technically qualified individuals.

**Classification according to VbF:**

Not applicable

**Water hazard class:**

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

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**ELINCS (European List of Notified Chemical Substances)**

None of the ingredients is listed.

**Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients are listed.

**REACH - Pre-registered substances**

1185-53-1 Tris(hydroxymethyl)aminomethane hydrochloride

56-40-6 Glycine

7647-14-5 Sodium chloride

**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:**

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  
VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

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