

MATERIAL SAFETY DATA SHEET

According to 2001/58/EG

Heinrich Kuper GmbH & CO KG

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1 - COMPANY – PRODUCTS IDENTIFICATION

COMPANY IDENTIFICATION:

Company name: Heinrich Kuper GmbH & CO KG

Bruchstr. 13-19

33397 Rietberg

Telephone: +49-5244-984-0

Telefax: +49-5244-984-201

E-mail: info@KUPER.de

PRODUCT IDENTIFICATION: Glass yarns for glue thread
Type 1220, 1210, 1110, 1130, 1320, K12, K3, K10
Type 2210, 2110

2 - COMPOSITION – INFORMATION CONSTITUANT PARTS

This Material Safety Data Sheet is valid for all these products.

Glass fibres are not substances but preparations within the meaning of EEC Directive 67/548 dated June 27th, 1967, corresponding to a mixture of E GLASS in the form of continuous strands and a SIZE. It is exactly the same for the American TSCA (Toxic Substances Control Act) legislation in which glass fibres are considered as items. The CAS number of glass fibre is 65997-17-3 (corresponding to the oxides used for production).

E GLASS is a glass with a very low alkaline content.

SIZE is a mixture of chemicals applied to the glass strands in a maximum quantity of 3% - more generally between 1% and 1.5% by weight.

3 - HAZARD IDENTIFICATION

Glass yarns for glue thread are not significantly hazardous.

Details about chemical hazards are given in paragraph 2. Toxicological aspects are developed in detail in chapter 11. The essential point to remember is that glass filaments are not “respirable” as they are over 3µm in diameter and have been shown not to cause lung cancer.

Hazards identified are:

- the formation of respirable filaments
- mechanical irritation (itching)
- extremely rare possibilities of allergy.

4 - FIRST AID

Inhalation: remove from the scene of exposure

Skin contact: wash copiously with lukewarm soapy water without, rubbing excessively

Eye contact: flush in running water (for at least 10 minutes) and consult a doctor

5 - FIRE FIGHTING

In case of fire, glass fibres are not flammable, are incombustible and don't support combustion.

Only the packaging (plastic film, paper, cardboard, wood) and the small amounts of size or binder are likely to burn. Combustion gases are basically carbon dioxide and water vapour. There may be small quantities of carbon monoxide and other substances which make it necessary to use protective devices in the event of a major fire.

Recommended extinguishing media: water or powder

6 - ACCIDENTAL SPILLAGE

Personal protection: see Chapter 8.

Environmental protection:

In leaching tests glass fibre wastes did not emit any significant quantities of dangerous products and they can therefore be considered as Inert Industrial Wastes, or even Common Industrial Wastes, as defined by national and local regulations. All waste and scrap materials should be disposed of in accordance with applicable national, federal, state and local regulations.

Cleaning:

Vacuum clean, sweep or shovel into containers normally used for glass fibre waste (selective collection).

7 - HANDLING & STORAGE

Handling:

(Technical measures / Precautions / Safe handling advice):

It is preferable to avoid prolonged contact with the skin: wear gloves, garments with sleeves and long leggings or protective overalls, goggles, and dust masks.

Glass filaments and dusts must be removed from work garments with a vacuum cleaner and not blown off with compressed air jets. Wash work garments separately from other clothes.

Storage:

Technical measures: respect the stacking procedure recommended for each type of product.

Storage conditions: store away from excessive humidity to prevent damage to the product and to the packing materials which could lead to storage safety problems.

Incompatible material: not relevant.

8 - EXPOSURE CONTROL – PERSONAL PROTECTION

Technical Measures

Use every appropriate means (suction, modification of manufacturing methods to reduce fibre dust...) to try to reduce the concentration of fibres likely to cause irritation.

Test parameters

Test ambient atmospheres in which glass fibre is used regularly to determine levels of

- “non respirable” and “respirable” filaments
- „non-respirable” and “respirable” dusts.

Legal requirements for respirable and non-respirable dusts and fibres vary from country to country (or do not even exist).

Personal protection equipment:

Protection of hands and other exposed parts of the body:

Gloves for the hands, long-sleeved garments and long leggings to prevent irritation.
People with delicate skin should apply barrier cream to exposed skin areas.
Eye protection: safety goggles (or masks) or safety glasses.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	solid
Form:	continuous or chopped or mats of fibre made up of continuous, parallel filaments glued together.
Colour:	white or yellowish white
Odour:	none

pH:	not applicable
Decomposition temperature:	Only size products start to decompose at 200°C
Flash point:	none
Explosive properties:	none
Density (molten glass):	2.6 g / cu. cm.
Solubility:	very low solubility in water. Sizes can be partially (and even totally) dissolved in most organic solvents.

Specific temperature at which changes in physical state occur:

Softening point (Littleton point): approximately 850 °C

Melting point: approximately 1200 °C

10 - STABILITY AND REACTIVITY

Stability

Stable in normal use and storage conditions, and in normally foreseeable usage conditions.

Hazardous reactions

No chemical hazardous reaction is foreseeable

Hazardous decomposition products

In continuous combustion conditions, in addition to water vapour and CO₂, small quantities of CO and NO_x may be released from the combustion of the size. Other products may be released in limited quantities, depending on combustion conditions. This is why it is recommended to use high-performance gas masks, when fighting intense fires.

11 - TOXICOLOGICAL INFORMATION

Acute toxicity: not relevant

The endless glass yarn are coated with special hotmelt and therefore is not lung penetrating.

12 - ECOTOXICOLOGICAL INFORMATION

E glass is not biodegradable.

Sizes or binders are organic materials slowly and only partial dissolved by natural agents like water. As the concentration of the ingredients in the mixture and ingredient solubility are low and as they have not been classified as hazardous, glass yarns are considered to have no adverse eco-toxicological effects.

Glass fibres and sizing products were not listed as products likely to destroy the ozone layer by the 1987 Montreal Protocol (Class 1 or Class 2). These lists are included in EC Regulation n° 3093/94 and in section VI of amendments to the "Clean Air Act " by the American Environmental Agency (EPA).

Glass fibre sizes do not contain PCB (Polychlorinated biphenyl) or and other polyaromatic products of the same type.

13 - WASTE DISPOSAL

Depending on local regulations, glass fibre wastes can either be considered at inert waste or as common industrial waste. As such they can be buried in landfills approved for these categories.

Glass fibres waste cannot be destroyed by incineration and can damage incinerators by the formation of a vitrified mass.

Clean cardboard, wood, plastic (film or bags) and packaging can be eliminated in units specific to these products (i.e. for recycling or use as fuels).

14 – TRANSPORT

International regulations:

Glass yarns are not considered as hazardous goods by transport regulations. They are part of one of the 13 hazardous classes listed in international regulations. They do not need special procedures under any regulations. For international transport in Europe by land (ADR, RID, ADNR), sea (OMI) or air (OAC/IATA or to the USA (DOT) or Canada (TDG), they are not shown as a risk category nor qualified by a UNO number or a packing group.

15 - REGULATORY INFORMATION

Continuous filaments glass yarns do not require hazardous product labelling (see Chapter 11).

General hygiene and work safety regulations apply (see Chapter 8).

Continuous filament glass yarns are preparations and for this reason are not listed as such in substance lists in several countries (EINECS in Europe, ELINCS, TSCA for the USA, DSL and NDSL for Canada, MITI for Japan, PICS for the Philippines, KECI for Korea, AICS for Australia..). When importing to these countries, it may be necessary to list the ingredients of the preparation.

16 - OTHER INFORMATION

Food environments:

Appendix III of European Directive 90/128/CEE and its most recent amendment 96/11/CE dated 5/03/96 defines the compatibility of pure glass fibres with food environments as additives to plastics. However the fact that sizing products should be shown on the current list of European Commission approved products, the BGVV LII list in Germany or the Food and Drugs Administration lists (FDA) in the USA means that a case by case study must be made if a range product is used to reinforce a plastic material in contact with food.

Contact with potable water:

As differ from country to country, every question must be examined individually.

This Material Safety Data Sheet is in addition to the Product. Specification file and other technical documents issued by us, but does not replace them.

The information given by this document is based on the date shown. It is given in good faith.

Furthermore, users attention is drawn to the possible risks run when the product is used for any purpose other than the one for which it was designed.

This MSDS does not exempt users from knowing and applying the rules regulating their activities. Users assume full responsibility for applying the appropriate safety measures when the product is used.