

PYROGLASS LIMITED
Unit 5 Astra Business Centre,
Ribbleton, Preston, PR2 5AP
United Kingdom.

Tel: +44 (0) 1772 651265
Fax: +44 (0) 1772 654912
e-mail: sales@pyroglass.com
www.pyroglass.com



PYROGLASS

Specialists in High Temperature Sealing Materials

MATERIAL SAFETY DATA SHEET

(9 1/1 55/EEC)

SECTION 1

PRODUCT AND COMPANY IDENTIFICATION

Product Names: PYROLAG, PYROSEAL, PYROTAPE, PYROSLEEVE

Supplier: As above **Emergency Telephone:** As above

SECTION 2

COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Nature

Description:

Knitted/braided high temperature round section seals, tapes, webbings, 'P' sections, and lagging materials, constructed from texturised glass fibre yarns.

Components

Name	CAS No	Content (%)	R phrases
Glass yarn	Mixture	100	-

Glass yarn

Composition consisting principally of oxides silicon, aluminium, calcium, boron and magnesium, fused in an amorphous vitreous state.

SECTION 3 HAZARDS IDENTIFICATION

Glass yarn

The fibres used have diameters greater than 3.5 microns and so are not respirable, nor can they become respirable by any normal industrial processing. Exposure to glass fibre filaments may cause irritation of the skin, eyes, nose or throat.

SECTION 4 FIRST AID MEASURES

Inhalation	if irritation persists, seek medical attention.
Eye contact	Flush immediately with water
Skin contact	Wash with soap and water
Ingestion	Seek medical attention.
Other	Observe good personal hygiene

MATERIAL SAFETY DATA SHEET
(9 1/1 55/EEC)

SECTION 5 - FIRE FIGHTING MEASURES

Suitable extinguishing media: Water, CO₂, foam, powder.

Special equipment for fire fighters

Wear self-contained breathing apparatus and protective suit.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions: No special precautions.

Environmental precautions

Dispose of as solid waste in accordance with government regulation.

Methods for cleaning

Sweep up and dispose of as non-hazardous solid waste

SECTION 7 - HANDLING AND STORAGE

Handling Non relative to health and safety.

Storage Store in dry area

SECTION 8- EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal protection

Respiratory: Not required unless dust is created. When machining, use forced exhaust to limit dust.

Hand: Barrier creams or rubber/plastic gloves for prolonged contact.

Eye: Wear goggles when cutting or machining.

Skin: Long sleeves and long trousers may be required for workers who have sensitive skin or contact dermatitis.

Hygiene: Wash hands after handling material.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Physical form	Solid.
Odour	None.
Softening point	800 °C
Density	2.6 - 2.7
Solubility	Not soluble in water

MATERIAL SAFETY DATA SHEET

(9 1/1 55/EEC)

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Conditions to avoid: None known

Materials to avoid: None known

Hazardous decomposition products

In a sustained fire, sizing and binders on the yarn may decompose releasing hazardous products of combustion.

SECTION 11 - TOXICOLOGICAL INFORMATION

Factors in fibre toxicity: **Fibre dimensions and degree of exposure.**

Fibre Dimensions: Fibres are either non-respirable or respirable. Respirable fibres can penetrate to the “deep” lung area. According to the World Health Organisation (WHO), man made mineral fibres with diameters equal or greater than 3.0 microns are non-respirable (1). According to the National Institute for Occupational Safety and Health (NIOSH), fibres with diameters equal to or greater than 3.5 micron are non-respirable (3). The narrow, bending passages of the human respiratory system, do not permit the relatively larger, non-respirable fibres to enter the “deep” lung area. Instead, they strike the surfaces of the upper respiratory tract, nose or pharynx, and stop. They may then be filtered by nasal hairs or other natural mechanisms. Due to the manufacturing process used, fibrous glass used in these products have diameters greater than 3.5 microns and are considered to be nonrespirable. The fibres do not become respirable upon breakage, the fibres break horizontally into smaller lengths but not longitudinally into smaller diameters.

Degree of Exposure: According to Johnson et al, in a 1969 US study of four fibrous glass production plants, “the results in terms of airborne concentrations of glass fibres and total dust would indicate that the workmen’s exposure to these materials is negligible” (1).

Carcinogenicity: The International Agency for Research on Cancer (IARC) is part of the World Health Organisation (WHO) IARC concludes that continuous fibre glass filaments are not classifiable as to their carcinogenicity in humans (Group 3) because there is inadequate evidence on the carcinogenicity of these materials in humans or experimental animals. In a 1987 US epidemiological study (20 years latency) of glass filament workers, there was no excess of respiratory cancer found. In a 1987 European study (over 20 years latency) there was no excess of lung cancer found.

MATERIAL SAFETY DATA SHEET

(9 1/1 55/EEC)

In both studies there was no increasing trend with an estimated time weighted measure of exposure. In a study administering large diameter glass filament (> 3micron) intraperitoneally to rats, no statistically significant tumour response was found. The American Conference of Governmental Industrial Hygienists (ACGIH) gives continuous filament fibre glass an A4 designation meaning there is inadequate data to classify it as carcinogen (2). Continuous filament fibre glass is not listed in the National Toxicology Program (NTP) 7th Annual Report on Carcinogens, nor is it regulated by OSHA as a carcinogen.

For reference – see Section 16

SECTION 12 – ECOLOGICAL INFORMATION

None known, not bio-degradable or water soluble.

SECTION 13 - DISPOSAL CONSIDERATIONS

These products are generally considered to be inert solid waste not requiring hazardous waste disposal procedures. Local and/or national regulations should be consulted to ensure proper disposal procedures.

No special precautions or restriction involving transport or conveyance of these products are known.

SECTION 14 – TRANSPORT INFORMATION

No special precautions or restriction involving transport or conveyance of these products is known.

SECTION 15 – REGULATORY INFORMATION

No special requirements

SECTION 16 – OTHER INFORMATION

References relating to Section 11.

1. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Man-made Mineral Fibers and Radon. Ccl. 43 1988 World Health Organisation.
2. Threshold Limit ValueR booklet, 1997. American Conference of Government Industrial Hygienists (ACGIH).
3. Occupational Exposure, Toxic Properties and Work Practice Guidelines for Fiber Glass by Bender, J., Konzen, J. and Devitt, G. American Industrial Hygiene Association No. 5 (AIHA), 1991.

The data in this material safety data sheet is to the best of our knowledge correct at the time of writing.