

## MATERIAL SAFETY DATA SHEET

### PRODUCT NAME : PIPE INSULATION JACKETS

#### 1. Product and Company Identification

Product name: Pipe Insulation Jacket  
Synonyms: None  
Item Numbers: Standard pipe/elbow insulation jackets:  
A550-01-049, A550-01-050, A550-01-051, A550-01-064, A550-01-065, A550-01-071  
Insulation jackets for Q series boosters:  
A505-25-000 (kit), A505-25-002 (jacket), A505-26-000 (kit), A505-26-002 (jacket)  
Insulation jackets for IH pumps:  
A533-80-028, A533-80-035 (kit).  
Kit contains: A533-80-032, A533-80-032, A533-80-033

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#### 2. Hazards Identification

##### EMERGENCY OVERVIEW

The insulation jackets, when properly handled according to guidelines provided in their associated working instructions, are not dangerous to human health and the environment.

For short and long term exposure effects, refer to Section 11 Toxicological Information.

Eye Effects: None likely in normal use. Glass fibres/dust can cause eye irritation.\*  
Skin Effects: None likely in normal use. Glass fibres/dust can cause skin irritation.\*  
Ingestion/Oral Effects: Not applicable.  
Inhalation Effects: None likely in normal use. Glass fibres are of sufficiently large diameter to be regarded as not respirable. Glass fibres can cause irritation of the upper respiratory tract.\*

\* Exposure to glass fibre insulation is only likely if the outer fabric is damaged. For example, as a result of being cut or being involved in a fire. The rubber coating encapsulates fibres in the outer fabric, making dust production most unlikely.

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MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

NFPA Hazard codes		HMIS Hazard codes		Rating System
Health	0	Health	0	0 = No Hazard 1 = Slight Hazard 2 = Moderate Hazard 3 = Serious Hazard 4 = Severe Hazard
Flammability	0	Flammability	0	
Instability	0	Reactivity	0	

### 3. Composition/Information on Ingredients

An insulation jacket consists of a glass felt insulating material with a silicone glass fabric covering. Once the jacket has been wrapped around the pipe, it is held in place by Velcro strips attached to the jacket.

**Glass felt:** borosilicate E glass with binders.

Ingredient	% Weight	CAS No	Hazard class*	Risk phrase*
Borosilicate E glass-composition is shown below	>98	65997-17-3	Not applicable	Not applicable
SiO <sub>2</sub>	53-60	Not allocated	Not applicable	Not applicable
Alkaline oxides (Na <sub>2</sub> O, K <sub>2</sub> O)	<2	Not allocated	Not applicable	Not applicable
Alkaline terrous oxides (CaO, MgO)	20-25	Not allocated	Not applicable	Not applicable
B <sub>2</sub> O <sub>3</sub>	0-9	Not allocated	Not applicable	Not applicable
Al <sub>2</sub> O <sub>3</sub>	11-15.5	Not allocated	Not applicable	Not applicable
TiO <sub>2</sub>	0-3	Not allocated	Not applicable	Not applicable
Binder: mixture of high molecular weight polymers	<2			

**Silicone glass fabric:** consists of cloth made of borosilicate E glass cloth (with binders) coated on each side with silicone rubber. Binder is < 2% of cloth.

Ingredient	% Weight	CAS No	Hazard class*	Risk phrase*
Borosilicate E glass		65997-17-3	Not applicable	Not applicable
Binder for glass fibre	Percentage composition of the fabric not available	Not allocated	Not applicable	Not applicable
Silicone rubber		Not allocated	Not applicable	Not applicable

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Velcro: consists of PEEK/Nomex fabric with polyurethane back coating.

Ingredient	% Weight	CAS No	Hazard class*	Risk phrase*
PEEK (polyetheretherketone)	48 (of fabric)	29658-26-2	Not applicable	Not applicable
Nomex (m-aramid)	52 (of fabric)	Not allocated	Not applicable	Not applicable
Polyurethane	Percentage composition not available	Not allocated	Not applicable	Not applicable

\*Hazard class & Risk phrase. These columns are only completed for ingredients which are classified as hazardous under EU Directive No 1272/2008 (as amended) and are present in sufficient concentration to make the overall substance hazardous. In all other situations, the column will be completed as "Not applicable".

### 4. First Aid Measures

The first aid measures below apply to the effects of glass fibres/dust. The presence of glass fibres/dust is only likely if the outer fabric of an insulation jacket is damaged; for example, as a result of being cut or being involved in a fire.

Eyes:	Irrigate the eyes if affected by the entry of dust.
Skin:	Wash with soap and running water.
Ingestion/Oral:	Wash out mouth with plenty of water. Seek medical attention if large quantities of fibres/dust are swallowed.
Inhalation:	Remove the individual to fresh air. Obtain medical advice.
Other Information:	None.

### 5. Firefighting Measures

Extinguishing Media:	Water, foam, carbon dioxide.
Fire and Explosion Hazard:	Insulation and outer fabric materials do not support combustion. Velcro fastening material is self extinguishing.
Special Protective Equipment for Firefighters:	In confined spaces or for large fires, firefighters should wear a Self-Contained Breathing Apparatus (SCBA) which meets appropriate standards operated in positive pressure mode, and full turnout gear.

For Flammability Properties - refer to Section 9.

### 6. Accidental Release Measures

If the jacket is damaged - for example by cutting, abrasion or heat - it should be handled using suitable personal protective equipment. For disposal of damaged jackets, refer to Section 13 'Disposal Considerations'.

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### 7. Handling and Storage

Handling: No special precautions are required for handling undamaged jackets.

Storage: jackets should be stored in a dry, well-ventilated area.

### 8. Exposure Controls/Personal Protection

#### Exposure Limits:

Ingredient	ACGIH - TLV	OSHA - PEL	Occupational Exposure Limits EH40 (UK)
None	Not applicable	Not applicable	Not applicable

#### Personal Protection:

Engineering Measures: None required.

Respiratory Protection: None required for normal handling.

Hand/Skin Protection: None required for normal handling. Gloves or barrier creams can be used to reduce the chance of skin irritation when handling glass fibre based products.

Eye/Face Protection: None required for normal handling.

Hygiene Measures: Practice good workplace hygiene. Do not eat or smoke when handling. Wash hands after use and before eating.

Other/General Protection: None.

Note: There is an Occupational Exposure Limit EH40 (UK) for man-made mineral fibres/dust of 5 mg/m<sup>3</sup> (8h TWA). This is only relevant in the unlikely event that the jacket is damaged sufficiently badly to produce dust. The glass fibres themselves are not respirable.

### 9. Physical and Chemical Properties

#### Glass Felt.

Appearance and Odour	White continuous fibre felt	Boiling Point	No data available	°C/ °F
pH (as supplied)	No data available	Melting Point	1200/2192	°C/ °F
Solubility in Water	Fibres insoluble	Auto Ignition	Not applicable	°C/ °F
Volatile Content by Volume	No data available	Flash Point	Not applicable	°C/ °F
Specific Gravity	2.6			
Vapour Pressure (mbar)	No data available	Vapour Pressure (Torr)	No data available	

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Silicone glass fabric.

Appearance and Odour	Grey, odourless fabric	Boiling Point	No data available	°C/ °F
pH (as supplied)	No data available	Melting Point (Glass fibre)	1200/2192	°C/ °F
Solubility in Water	Insoluble	Auto Ignition	Not applicable	°C/ °F
Volatile Content by Volume	Not applicable	Flash Point	Not applicable	°C/ °F
Specific Gravity	2.6			
Vapour Pressure (mbar)	No data available	Vapour Pressure (Torr)	No data available	

Velcro.

Appearance and Odour	Grey, odourless fabric	Boiling Point	No data available	°C/ °F
pH (as supplied)	No data available	Melting Point (Glass fibre)	1200/2192	°C/ °F
Solubility in Water	Insoluble	Auto Ignition	Not applicable	°C/ °F
Volatile Content by Volume	Not applicable	Flash Point	Not applicable	°C/ °F
Specific Gravity	2.6			
Vapour Pressure (mbar)	No data available	Vapour Pressure (Torr)	No data available	

### 10. Stability and Reactivity

Stability: Stable.

Material/Conditions to Avoid: Velcro has a temperature limit of 200 °C.

Hazardous Decomposition: In a sustained fire, toxic/irritant fumes and smoke including, carbon dioxide, carbon monoxide and silicon dioxide can be produced.

Hazardous Polymerisation: Will not occur.

### 11. Toxicological Information

For a comprehensive description of the various toxicological (health) effects which may arise if the user comes into contact with the substance or preparation, refer to Section 2 Hazards Identification.

#### Animal data:

LD50 value: No data available.

LC50 value: No data available.

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### Carcinogenicity:

Continuous glass filaments have not been classified as possible carcinogens by IARC (the International Agency for Research on Cancer). The filaments also have no known mutagenic risk.

### 12. Ecological Information

No adverse environmental effects are known for the materials of construction of the jacket.

Mobility: No data available.

Degradability: E glass is not biodegradable.

### 13. Disposal Considerations

Disposal should be carried out in accordance with all local and national requirements. Burial at controlled industrial landfill sites is appropriate. Incineration should not be used because glass fibre waste is not destroyed but may form a vitrified mass (which can damage the incinerator).

### 14. Transport Information

This product is not classified as dangerous under transport regulations.

PARAMETER	EUROPEAN	CANADIAN TDG	UNITED STATES DOT
Proper Shipping Name	Not applicable	Not applicable	Not applicable
Hazard Class	Not applicable	Not applicable	Not applicable
Identification Number	Not applicable	Not applicable	Not applicable
Shipping Label	Not applicable	Not applicable	Not applicable

### 15. Regulatory Information

#### European Regulatory Information

This product has been classified in accordance with EU Regulation No 1272/2008 (as amended) on the Classification, Labelling and Packaging of Substances and Mixtures.

Classified as dangerous to supply: No.

Risk Phrases: Not applicable.

Safety Phrases: Not applicable.

Symbols: Not applicable.

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### United States Regulatory Information

All materials contained in this product are on the US Toxic Substances Control Act (TSCA).

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION:

This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 and 40 CFR Part 372.

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

### Canadian Regulatory Information

Product is a manufactured item not subject to DSL listing.

WHMIS Classification: Not Applicable (manufactured article).

### 16. Other Information

This MSDS is compiled in accordance with ANSI Z400.1 and Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Sources of information for this data sheet:

- Vetrotex International Safety Data Sheet 'Continuous filament fibre glass for reinforcement'. Issue date: 17 January, 1998.
- TBA Textiles Health and Safety Data Sheet for Glass Fibre Textiles. Issue date: August, 1994.
- Selectus Safety Data Sheet for Velcro (PEEK/Nomex quality). Issue 1. Date: November, 1996.

### Glossary:

**ACGIH** - American Conference of Governmental Industrial Hygienists; **ANSI** - American National Standards Institute; **Canadian TDG** - Canadian Transportation of Dangerous Goods; **CAS** - Chemical Abstracts Service; **CFR** - Code of Federal Regulations; **Chemtrec** - Chemical Transportation Emergency Center (US); **DSL** - Domestic Substances List; **EEC** - European Economic Community; **EH40 (UK)** - HSE Guidance Note EH40 Occupational Exposure Limits; **EPCRA** - Emergency Planning and Community Right-to-Know Act; **EU** - European Union; **HMIS** - Hazardous Material Information Service; **LC** - Lethal Concentration; **LD** - Lethal Dose; **NFPA** - National Fire Protection Association; **OSHA** - Occupational Safety and Health Administration, US Department of Labour; **PEEK** - Polyetheretherketone; **PEL** - Permissible Exposure Limit; **SARA (Title III)** - Superfund Amendments and Reauthorization Act; **SARA 313** - Superfund Amendments and Reauthorization Act, Section 313; **SCBA** - Self-Contained Breathing Apparatus; **TLV** - Threshold Limit Value; **TSCA** - Toxic Substances Control Act Public Law 94-469; **TWA** - Time-Weighted Average; **US DOT** - US Department of Transportation; **WHMIS** - Workplace Hazardous Materials Information System.

### Revisions:

April 2009 - Data Sheet updated to reflect the latest supplier safety information.

June 2010 - Data Sheet updated to reflect current regulatory information.

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