



# BETA+PLUS phenolic pipe section



Product name		Beta + Phenolic Foam			1/1/	2006							
Dimensions		Standard Length 1 metre. Standard pipe section 15mm-219mm in halves. 245mm-381mm in quarters and above in R&B lags unless a special request is made.											
Application		HVAC , Hospitals, Pharmaceutical, Food Processing, Dairies and Breweries											
Content		95% Closed Cell BS4370 Nominal density Completely CFC and HCFC free. 40 kg/ m3 Zero ozone depletion potential											
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Thermal			21 W/m.K			perature range °C							
conductivity			3 W/m.K 5 W/m.K -180 +120										
		-											
Fire classification	UK	Class O Building Regulations BS476 Parts 6 & 7 - Report numbers 148241, 148243											
	USA	ASTM E84 25/50 Flame and Smoke – up to 3 inches thick -											
	France	Epiradiateur M1 -  Din 4102 B1 -											
211	Germany												
Other approvals	NEN	6065/6066 KLASSE 1/2											
Quality control	BS/EN	9000:2001											
	Canada	Underwriters Laboratory of Canada											
Other product properties		Beta+Plus is supplied with a factory applied Class O aluminum foil vapour barrier											
		Can also be provided plain or with other facings											
		Compressive stress	BS4370	Parallel to ris 180kPa +/- 40		endicular to rise :Pa +/- 40							
		Tensile	BS4370	Parallel to ris		endicular to rise							
		Strength	034370	200kPa +/- 4	•	kPa +/- 40							
Packing		Brown	References:										
, weiting		Cardboard	1) Calculations available from our technical department										
		Boxes	2) Installation as per BS5970:2001										
		Dimensions 3) GRM supplies pipe insulation products which are capable of meeting											
		1mx500mmx500mm the thermal requirements of the environmental tables of BS5422											
		(2001) when applied appropriately and thereby making certain											
		installations eligible for the Enhanced Capital Allowances Scheme. However, compliance can only be assured by accurate assessment of the application, pipe temperature, pipe size, the thermal conductivity of the insulation at the relevant mean temperature and the thickness applied. Advice on compliance issues can be											
									obtained by contacting GRM staff on 0161-301-6562 or e-mailing to				
										robin.parker@ntlworld.com or sdavock@grmltd.co.uk			
										4) Specifications can be written on request from our technical department			
Health and Safety		Material	See Reverse										
		Safety Data	-										

# Other Information

This Information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of GRM Distribution Ltd. The data on this sheet relates only to the specific material designated herein. GRM Distribution Ltd assumes no legal responsibility for use upon this data. For information regarding specific applications of the product please contact GRM Distribution Ltd.





# MATERIAL SAFETY data sheet



#### IDENTIFICATION OF THE CHEMICAL AND OF THE MANUFACTURER, IMPORTER OR OTHER UNDERTAKING

1.1 Identification of the substance or preparation.

Formshaped Phenolic products like boards, pipe sections, segments and R&B insulation manufactured by GRM Distribution Ltd.

Trade name Beta + Phenolic Foam

.2 Identification of the manufacturer, importer or other undertaking.

1.2.1 Manufacturer GRM Distribution Ltd

1.2.2 Street address Unit G Victoria Mill Manchester Road Town, Country and post code Droylsden Manchester England M43 6EQ

Telephone number +44(0)161 301 6562

Telefax +44(0)161 301 5444

Name and address of the informant in emergency cases Emergency telephone number -

#### 2. COMPOSITION AND INFORMATION ON INGREDIENTS

2.1 Description

Phenoilc products for building, technical insulation. The products are formshaped like boards, pipe sections, segments and R&B lags. The Product is Phenol-Formaldehyde Rigid foam resin. The products are either with or without facing. The facing can be for instance paper, aluminium foil, glass or polypropene tissue, a thin metal sheet or a polymeric sheet.

2.2 Hazardous ingredients

Not Hazardous: 100% completely reacted crosslinked cellular foam product.

foam product 2.2.1 CAS number or other code

2.2.2 Name of the ingredient

2.2.3 Concentration

2.2.4 Warning symbol, R phrases and other data on the ingredientCAS 78-78-4 EINECS 201-142-8ISO Pentane S isomere mix4-7%-

#### 3. HAZARDS IDENTIFICATION

3.1 Inhalation

Under extreme dusty conditions respiratory irritation may occur.

3.2 Skin

Prolonged exposure may cause irritation.

3.3 Eyes

Dust in the eyes may cause irritation.

3.4 Ingestion

May cause irritation of the mouth and digestive tract.

## 4. FIRST AID MEASURES

4.1 Special instructions

4.2 Inhalation

If distress is caused by over exposure to high dust levels, medical attention is required.

4.3 Skir

Wash with soap and water.

4.4 Splashes in eyes

Flush out with clean water.

4.5 Ingestion

Wash mouth with water do not induce vomiting. Seek medical attention.

#### 5. FIRE-FIGHTING MEASURES

5.1 Expanded Bakelite foam is difficult to ignite and tends to not support combustion when the flame source is removed.

5.2 Flashpoint : Not applicable
5.3 Flammability Limits : Not applicable
5.4 Autoignition Temperature : Not Determined

5.5 Hazardous combustion products: Primarily carbon dioxide and carbon monoxide will be produced. Traces of other organic compounds may be produced.

5.6 Extinguishing Media : Use water, Foam, CO<sub>2</sub> or dry chemical.

#### 6. ACCIDENTAL RELEASE MEASURES

6.1 Land Spill : Material is a solid pick-up and handles as

any other inert solid material.

6.2 Water Spill : Material is lighter compared to water, the expanded Bakelite foam floats, collect floating pieces and handle as any other inert solid

material.

#### 7. HANDLING AND STORAGE

7.1 Handling & Storage

Store in a dry area, protect from abuse and follow all MSDS warnings.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Engineering Controls : None should be required in an area

with free air flow. Positive ventilation should be used in confined spaces if

dust becomes evident.

8.2 Dust Mask : Dust masks are to be used by properly trained personnel only. Wear an

appropriate and properly fitted dust mask when cutting, grinding or milling

phenolic foam.

8.3 Protective Clothing : Wear safety glasses, face shields or

goggles. The use of gloves (polyvinyl or latex) is recommended. For industrial clothes use clothes made of polyester fibres.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance : Rigid Cellular foam

9.2 Apparent density Kg/m³ : 35 to 320
9.3 Colour : Grey
9.4 Odour : None
9.5 Frozzing Point : Not Applicable

Freezing Point : Not Applicable 9.5 **Boiling Point** : Not Applicable 9.6 Vapour Pressure : Not Applicable 9.7 Vapour Density : Not Applicable 9.8 Molecular weight : Not Applicable Water Solubility Insoluble Volatile by volume : Not Applicable 9.11

9.12 Evaporation rate : Not Applicable
9.13 pH : Not Applicable

9.14 Viscosity : Not Applicable is solid

#### 10. STABILITY AND REACTIVITY

The cross-linking reaction used to manufacture Expanded Bakelite foam is irreversible.

10.1 Stability : Stable
10.2 Polymerisation : Will not occur

: Decomposition through burning may produce fumes consisting of organic particles, carbon dioxide and carbon monoxide (TLV = 50 PPM).

10.4 Incompatible materials and conditions to avoid

: None

### 11. TOXICOLOGICAL INFORMATION

# 12. ECOLOGICAL INFORMATION

12.1 Manufactured with Zero ODP blowing agent.

#### 13. DISPOSAL CONSIDERATIONS

No special regulations are required for disposal of Beta Foam.

#### 14. TRANSPORT INFORMATION

14.1 No special regulations are required for transportation of the products.

14.2 Proper Shipping Name : Not Classified

14.3 Hazard Class : Not a hazardous material

14.4 Identification Number : Not Applicable

#### 15. REGULATORY INFORMATION

Decomposition through burning may produce fumes consisting of organic particles, carbon dioxide and carbon monoxide (TLV = 50 PPM).

# 16. OTHER INFORMATION

