



# PYROMASTIC BIO

## REFRACTORY REPAIR, JOINT-FILLING & PATCHING MATERIAL

Pyromastic Bio is a ready-to-use construction material containing alkaline-earth silicate fibers, which is intended for high-temperature applications such as contact with molten metals or hot gasses.

Pyromastic Bio is an easy-to-use yet robust solution for installation of refractory components, joint filling, patching, refractory repair, and more.

Pyromastic Bio is insulating and resistant to both mechanical erosion and chemical corrosion in harsh environments.

### BENEFITS

- Mechanically tough
- Resistant to chemical corrosion
- Adheres to both refractory (ceramic) and metal substrates
- Easy to apply with hands or hand tools
- Thermally insulating

### APPLICATION

Pyromastic Bio should be applied to a clean substrate which is free of non-wetting coatings or other dust and debris. Apply by hand or using tools to create a smooth finished surface. Allow eight hours of drying per inch of thickness, or speed drying using gentle heating. Pyromastic Bio is water soluble and can be thinned with water, as needed.



### AVAILABILITY

- 15 kg (33 lb) pail
- 8.5 kg (19 lb) pail
- 5 kg (11 lb) pail
- 0.9 kg (2.0 lb) sachet bag
- 0.5 kg (1 lb) tube

### STORAGE AND SHELF LIFE

- Store in a cool place and avoid freezing temperatures
- Pyromastic Bio should be used within four months of manufacture date
- Pyromastic Bio V2 should be used within six months of manufacture date
- Pyromastic Bio 1300 should be used within eight months of manufacture date

### HEALTH AND SAFETY

Please see Pyrotek safety datasheet for details.

### PHYSICAL AND CHEMICAL PROPERTIES

Product	Pyromastic Bio	Pyromastic Bio V2	Pyromastic Bio 1300
Description	Original and proven recipe containing alkaline-earth silicate fibers, chemical binders, and other minerals.	Modified recipe containing alternative alkaline-earth silicate fibers for improved adhesion to hot-application substrates.	A modified fiber and binder system in this product extends its shelf life and increases its maximum application temperature.
Chemistry	68% Al <sub>2</sub> O <sub>3</sub> , 25% SiO <sub>2</sub> , 4% CaO + MgO	70% SiO <sub>2</sub> , 25.5% CaO, 4.5% MgO	71.5% Al <sub>2</sub> O <sub>3</sub> , 23.5% SiO <sub>2</sub> , 4.0% MgO
pH	5-6	9	7
Wet Density	1.5 g/cm <sup>3</sup>	1.2 g/cm <sup>3</sup>	1.5 g/cm <sup>3</sup>
Dry Density	1.0-1.1 g/cm <sup>3</sup>	0.3-0.4 g/cm <sup>3</sup>	1.0-1.1 g/cm <sup>3</sup>
Max Usage Temp.	1250°C	1100°C	1300°C
Thermal Conductivity	0.08 W/mK at 200°C 0.12 W/mK at 400°C 0.17 W/mK at 600°C 0.21 W/mK at 800°C	0.08 W/mK at 200°C 0.11 W/mK at 400°C 0.16 W/mK at 600°C 0.19 W/mK at 800°C	0.08 W/mK at 200°C 0.12 W/mK at 400°C 0.17 W/mK at 600°C 0.21 W/mK at 800°C

