



Designed to Take the Heat

Kerathin Fiberplast

Moldable Ceramic Fiber

Kerathin Fiberplast is a family of ready-to-use, fine grained moldable mastic materials consisting of high purity ceramic fibers, inorganic binding agents and rheological additives.

Kerathin Fiberplast is used to fill cavities and plug cracks in furnace linings, as back-up insulation in furnaces and reactors and for insulating piping connections and other exposed metal parts. In addition, **Kerathin Fiberplast** can be used to repair ceramic fiber module linings and boards, as well as an adhesive for fibrous parts, where a thicker layer of adhesive is necessary to compensate for uneven bond-surfaces.

Kerathin Fiberplast is able to be air hardened. The hardening process can be accelerated by exposing the product to forced air at 120 - 150°C (250 - 300°F). Drying time is a function of the thickness, temperature and humidity. It can be fired immediately after drying. (See instructions for use on reverse side.)

KERATHIN FIBERPLAST		1000	1260	1400	1500	1600	1700	1800	1600 HA	
Classification Temperature	°C	1000	1300	1400	1500	1600	1700	1800	1600	
	°F	1832	2372	2552	2732	2912	3092	3272	2912	
Service Temperature	°C	1000	1150	1300	1400	1500	1650	1800	1600	
	°F	1832	2102	2372	2552	2732	3002	3272	2912	
Chemical Analysis (%)	Al ₂ O ₃	60	63	65	66	68	73	80	98	
	SiO ₂	38	36	34	33	31	27	20	2	
Ceramic Bonding from	°C	1000	1000	1000	1000	1000	1300	1300	1300	
	°F	1832	1832	1832	1832	1832	2372	2372	2372	
Wet / Dry Density	kg/m ³	1500 /	1500 /	1500 /	1500 /	1500 /	1500 /	1500 /	1500 /	
	lb/ft ³	900 /	900 /	900 /	900 /	900 /	900 /	900 /	900 /	
		93 / 56	93 / 56	93 / 56	93 / 56	93 / 56	93 / 56	93 / 56	93 / 56	
Shrinkage 24 hours at	900°C (1652°F)	(%)	1.0	0.5	---	---	---	---	---	
	1000°C (1832°F)	(%)	2.0	1.0	0.5	---	---	---	---	
	1100°C (2012°F)	(%)	---	3.0	2.5	0.5	---	---	---	
	1260°C (2300°F)	(%)	---	4.0	3.0	2.5	0.5	---	0.5	
	1400°C (2552°F)	(%)	---	---	4.0	3.0	2.5	0.5	1.5	
	1500°C (2722°F)	(%)	---	---	---	4.0	3.0	1.0	0.5	2.0
	1600°C (2912°F)	(%)	---	---	---	---	4.5	3.0	1.0	2.5
	1700°C (3092°F)	(%)	---	---	---	---	---	4.5	2.0	---
	1750°C (3182°F)	(%)	---	---	---	---	---	---	3.0	---
Air Setting			Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Product form: Wet, ready to use
Note: HA represents High Alumina content
Shelf life: 1 year (See reverse side)

Packaging: 5, 10, 20 kg (11, 22, 44 lb) pails
 310 ml (10.5 oz) cartridges
 Weight/cartridge 0.5 kg (1 lb)



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Instructions for Use

Kerathin Fiberplast is a moldable material based on ceramic fibers and fillers, organic and inorganic bonding agents. It hardens while air drying. For faster hardening, the **Kerathin Fiberplast** can be subjected to a temperature marginally above 100°C (212°F). Initial ceramic bonding takes place at approximately 1000°C (1832°F).

1. **Kerathin Fiberplast** must be stirred well each time before use, unless using caulking tube. Clean water* can be added to control the rheology to the required consistency. If not using entire container, dilute only the amount of **Kerathin Fiberplast** needed in a separate container.
 2. **Kerathin Fiberplast** can be applied using a spatula, trowel, mortar machine, or from a cartridge. Adhesion to ceramic fibers or grease free metal bases can be improved by wetting with **Kerathin Rigidizer** or water* (for high temperature application) corresponding to the grade of **Fiberplast** used. If applied directly to metal, supporting elements must be used such as rib mesh, chain fabric, corrugated anchors, slotted pins, etc., to ensure good mechanical attachment.
 3. Apply **Kerathin Fiberplast** up to 3.0 mm (1/8") as an adhesive, or thicker to fill gaps. The amount used as an adhesive will depend on the absorption properties of the materials to be joined. Apply as thin as possible. The normal amount is between 3 and 5 kg/m² (0.25 to 0.5 lb/ft²) of surface area. If applying a thicker layer (1 - 4 inches), after initial air drying, pierce a grid of small holes to allow vapor to escape. When using as an adhesive, do not allow a skin to form on the **Kerathin Fiberplast** before the two parts to be joined are brought together.
 4. Hardening occurs with air drying. The drying process can be accelerated by exposing **Kerathin Fiberplast** to temperatures from 120 - 150°C (250 - 300°F) for a minimum of two hours.
 5. Ceramic bonding occurs from temperatures exceeding 1000°C (1832°F).
 6. After use, ensure the **Kerathin Fiberplast** container is closed and air-tight. Storage is enhanced by applying a thick layer of pure distilled or deionized water over the top of the remaining **Kerathin Fiberplast**.
- ▲ **Caution:** Upon first firing, some organics will be oxidized. Heating should occur in a well ventilated area.
 - ▲ **Note:** When adding water, distilled or deionized should be used for **Kerathin Fiberplast 1600, 1700, 1800** and **1600 HA** in order to keep impurities (water hardness) out which would increase the thermal shrinkage.
 - ▲ **Shelf life:** 1 year (dry and cool condition; keep from freezing)
Correct storage can extend the shelf life up to a few years.