

FiberPlast 1800PRO PERMANENT ADHESION AT HIGHEST TEMPERATURES

High-temperature adhesive made of polycrystalline mullite/alumina wool (PCW) up to **1750 °C (3182 °F)** application temperature



Photography: CARABIN CREATIVES | corporate + digital solutions

FiberPlast 1800PRO is an improved, plastically deformable compound made of polycrystalline mullite/alumina wool (PCW), an inorganic binder, and various additives. The adhesive is supplied premixed and ready to use. It can be used at application temperatures up to **1750°C**.

FiberPlast 1800PRO contains milled PCW fibers and binders. Due to its higher bending strength, lower shrinkage, and higher solid content compared to previous FiberPlast materials, **FiberPlast 1800PRO** is an excellent fiber-to-fiber adhesive for insulation boards. It can also be used as a surface coating and for repairing cracks and holes. When used as a coating, it minimizes abrasion and dust formation caused by thermal and corrosive loads.



Photography: Lothar Wels – www.wels-images.com

FiberPlast 1800PRO is particularly easy to process and will hold reliably and permanently at high temperatures. The process starts with cleaning the surface of dust. Then, it should be lightly sprayed with water. After that, the surface should be treated with a thin layer of **FiberPlast 1800PRO**. When gluing: after compressing the surfaces to their final positions, the parts should be dried under pressure at room temperature for 24 hours. The parts can also be dried in a dryer. If cracks occur during the drying or pre-sintering process, they can be glued or filled with **FiberPlast 1800PRO** again. If the material is too stiff for your application, you can add a small amount of water and mix it.

YOUR BENEFITS WITH FIBERPLAST 1800PRO AT A GLANCE

- ✓ Bonded or coated ceramic fiber-based parts
- ✓ For permanently safe adhesion
- ✓ Application temperatures up to **1750 °C**
- ✓ Single-component adhesive ready for use and easy to process
- ✓ Also for repairs and maintenance work

MATERIAL PROPERTIES OF FIBERPLAST 1800PRO

	FiberPlast 1800PRO
Colour	White
Max. service temperature	1750 °C 3182 °F
Al ₂ O ₃	84 %
SiO ₂	16 %
Bulk density Wet	1650 kg/m ³
Solid content	57 %
Type of packaging	1 kg Other type of packaging upon request.
We will gladly develop special high-temperature masses, such as adhesives or coatings, together with you to suit your requirements.	

USING RULES

Application

The adhesive can be used to glue high-temperature insulation boards made of ceramic fiber and polycrystalline mullite/alumina wool (PCW), as well as for coating such boards. This helps to avoid increased abrasion caused by thermal and corrosive loads.

Handling

Before starting the process, the surface to be coated or glued must be cleaned of dust and lightly sprayed with water. A normal spray bottle can be used for this purpose. Both surfaces should then be treated with 0.2 - 0.3 mm of **FiberPlast 1800PRO**, using a spatula or paint roller. After applying the coating, press the surfaces together in their final positions. The parts should be dried under pressure at room temperature for 24 hours. Alternatively, the parts can be dried in a dryer for 6 – 9 hours at 105°C. To increase the strength, you can pre-sinter the parts at 1,250°C for 2 hours. If cracks occur during the drying or pre-sintering process, they can be glued or filled again with **FiberPlast 1800PRO**.

Safety Instructions

During handling, a dust mask (FFP2), protective glasses with side protection, and rubber gloves should be worn, as dust formation can occur.