

KERAPATCH STAINLESS

Description; Kerapatch stainless is a phosphate bonded chrome-alumina plastic material. The chromia is present in a fused grain, giving its chemical benefits without the health problem. It is designed for HOT PATCHING in thin layers. It is supplied in soft plastic consistency, ready to use, in plastic buckets.

Uses:

1. Induction furnace repairs.
2. Metal splash shields.
3. Launder tips.
4. Sliding gate maintenance.
5. Long-life ladles and teapot ladle repairs.
6. Runners and launders.
7. Water-cooled plate protection.

Composition: The aggregate is fused chrome alumina: a high purity synthetic alpha alumina polycrystalline aggregate with good temperature and chemical stability. The matrix is tabular alumina which has good bonding properties and thermal shock resistance. The phosphate binder develops high strength at 100°C. A complex series of dehydration reactions follow, culminating in a very strong anhydrous bond at 400°C. The ceramic bond develops from 1000°C, and rapidly above 1200°C. Before the phosphate becomes pyroplastic, the chrome-alumina bond is well developed. Consequently it has very high strength over the whole temperature range from 100°C to 1800°C.

Application:

Apply it to a HOT surface.

Open the bucket and scoop out with a trowel. Squeeze it into position and trowel it down to about 10mm thick. It hardens rapidly, and can be built up in successive layers. Single thick layers tend to bloat badly.

Metal splash shields etc.

Plaster onto expanded metal. Where mechanical stresses are great, another system is used; Hexmetal reinforcing. The sheet of honeycomb metal is welded onto stainless steel plate and the Kerapatch packed into it. Each cell of the honeycomb is independently anchored, and the structure can withstand severe expansion and contraction and mechanical abuse. This system can be used on water-cooled copper panels etc.

Chemical analysis;

Al ₂ O ₃	82.0%
Cr ₂ O ₃	7.2%
Fe ₂ O ₃	1.7%
SiO ₂	4.0%
TiO ₂	0.02%
CaO	1.5%
MgO	0.2%
Na ₂ O	0.3%
K ₂ O	1.0%
P ₂ O ₅	3.4%
<i>Total</i>	101.5%

Packaging;

25kg plastic buckets, ready to intstall.

Shelf life;

Can be stored for years. Keramicalia will swop material which has gone stiff for fresh material.

Dev. No: 27900