

Kaowool Hardener/Superwool Hardener



Datasheet Code 5-6-10 E

MSDS Code 104-9-EURO REACH

© 2009 Morgan Thermal Ceramics, a business within the Morgan Ceramics Division of The Morgan Crucible Company plc



DESCRIPTION

Kaowool and Superwool hardeners are inorganic liquid hardening agents which, when applied to Blanket, Modules or Board, produces a hard surface finish with increased resistance to mechanical abrasion and to gas flow erosion.

Blanket, Modules and Board can be treated to produce depths of hardening varying from a thin eggshell surface to total penetration, the latter resulting in a rigidised material. During storage the Hardener temperature should not fall below +2°C. The product has a shelf life of approximately 12 months.

APPLICATIONS PROCEDURE

Hardener is normally used diluted 50-50 with water and can be applied by brushing, spraying, or dipping. Spray operation should be carried out under well ventilated conditions, taking care to avoid breathing in the spray.

The amount needed varies with the type of application, and is dependent on variables such as Blanket density and the depth of treatment required. As a surface coating, 2.5 litres of diluted Hardener will cover 1m², and 17 litres will saturate the same area of 25mm @ 128kg/m³ Blanket.

Drying procedure is not critical but 12 hours at 90°C is fairly typical. Natural drying is feasible but, in the case of through-hardened Blanket or Board, migration of Hardener to the material surface may occur.

APPLICATIONS

Where enhanced resistance to erosion by high velocity gases is required, such as occur around burner block assemblies, Blanket Modules or Board can be hardened after installation.

A final hardening spray is often given to the Blanket hotface linings of furnaces, ductwork, etc. where gas flow is significant, or when it is desired to impart some resistance to mechanical damage.

Surface hardening is also recommended for applications involving contact with molten non-ferrous metal, e.g. launder linings.

Kaowool Hardener/Superwool Hardener



Main properties

General Properties		Kaowool	Superwool
Classification temperature	°C	1260	1260
Colour		white (translucent liquid)	pink (translucent liquid)
Solids content (by weight)	%	28-29 approx	25
Specific gravity @ 25°C		1.203	1.2
Viscosity	cP	4	
pH value		9.7	4-7

Note : The hardeners are not interchangeable - Kaowool Hardener for all Kao and Cera products and Superwool Hardener for all Superwool products

Availability

- Kaowool Hardener is supplied in 5 litre and 200 litre containers
- Superwool Hardener is supplied in 5 litre containers

The values given herein are typical values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Therefore, the data contained herein should not be used for specification purposes. Check with your Thermal Ceramics office to obtain current information.