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### **TECHNICAL DATA SHEET**

# **METALCOTE 23**

# Insulating coating for dies in Aluminium gravity casting and low-pressure moulds





# **DESCRIPTION**

Metalcote 23 is an insulating coating, with fine texture, recommended for gravity and low pressure die face. Particularly suitable as a primer base to promote adhesion for a second layer of coating.

#### PRODUCT PHYSICAL DATA

Appearance:	Soft paste	Colour:	Red
Specific Gravity:	1,9 g/cm³	Casting finish:	Fine

#### **METHOD OF USE**

The product should be diluted in water according to the density and thickness of the layer on a hot and clean die using an air spray gun with a fine nozzle.

Coating should be applied in thin layers.

Each layer should be allowed to air dry prior to the application of a new layer.

This method ensures smooth shiny surface to the castings produced.

It is important to consider for a long-life to apply a first layer of 20 microns on very clean hot die surface at 180°C than heat in stove at 220°C, then apply a second 50 or 70 micron layer, heat again up to 250°C.

The die is then ready to be installed on the casting machine.

In some cases, a third layer is applied to extend the working life of coating and achieve long production cycles.

Touch ups and repairs of an eroded coating layer are possible with a more diluted mix.

# **DIE TEMPERATURE**

The die should be cleaned and pre-heated to a temperature of 150-180°C.

A higher temperature will compromise the adhesion of the product and will possibly cause cracking and peeling of the coating.

Die temperature is critical for good application and increased coating life.

An infrared or contact pyrometer must be used to verify the correct temperature.

# **DILUTION RATIO**

For spraying application Metalcote 23 needs a dilution of 1 part of product with 3-4 parts of water.

Exact dilution ratio must be tested with the support of an experienced operator.

The use of a mixing tank is recommended to have a more homogeneous mix and ready to use material to pour in the spray gun reservoir.

# **PACKAGING AND STORAGE**

8 kg tins

Warnings: The product is frost-sensitive: Store at temperatures above 5 ° C and close the pails after each use.

It is possible that during storage some products containing mineral ingredients tend to precipitate.

This phenomenon is normal due to the specific density of the minerals.

It is important to mix the product carefully before use.

If properly stored the product shelf life exceeds 12 months.

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