

## **ECO - H COTE 110**

(High emissivity protective refractory coating)

### **PRODUCT DATASHEET**

ECO - H COTE 110 is a high performance refractory coating specially formulated with the incorporation of inert zirconium compounds stabilised and bonded with ceramic oxides. This imparts protective refractory barrier on base refractories such as bricks, monolithics, castables, ceramic fibre modules etc.

ECO-H COTE 110 coating exhibits high emissivity, abrasion resistance, nonwetting characteristics, spalling resistance and superior sealing action which further enhance the performance of the refractories while protecting them from corrosive attack of molten metal, oxides and other compounds at high temperatures upto 1900<sup>o</sup>c

#### **Product Function:-**

ECO - H COTE 110 due to the incorporation of inert zirconium compounds stabilized through ceramic oxide bond, functions as superior refractory coating having following characteristics: -

**1. Protection of base refractories**

ECO - H COTE 110 protects the base refractories from the direct attack of corrosive molten metal, oxide slag, and other compound because of the protective nature and sealing ability of the coating.

**2. Improvement in abrasion resistance and wear resistance**

ECO - H COTE 110 improves the abrasion resistance and wear resistance of the base refractories because of the inherent properties of zirconium compounds bonded ceramically.

**3. Improvement in non-wetting characteristics**

ECO - H COTE 110 further improves the non-wetting characteristics of the base refractories particularly to molten aluminium and non-ferrous metals their oxides and slag because of chemical inertness of zirconium compounds incorporated in the formulation.

**4. Improvement in the life of base refractories**

ECO - H COTE 110 further enhances spalling resistance of the base refractory because of superior thermal shock resistance of the barrier coating having stabilised zirconium compounds.

**5. Increase in heat emissivity and reduction in fuel consumption.**

ECO - H COTE 110 imparts the barrier coating having very high heat emissivity and heat reflection properties which reduces the fuel consumption considerably. It also prevents the leakages because of tight sealing effect.

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**Benefits: -**

The base refractories coated with ECO - H COTE 110 as protective refractory coating yield following major benefits:-

**\* Overall improvement in refractory performance**

ECO - H COTE 110 further enhances the overall refractory performance of the base refractories because of improvements in abrasion resistance, wear resistance, spalling resistance and non-wetting properties.

**\* Improvement in life of refractories**

ECO - H COTE 110 because of its protective nature considerably improves the life of the base refractories. The breakdown and the maintenance cost is also reduced considerably as coating can be used as a very good repair compound.

**\* Improvement in the quality of castings**

The application of ECO - H COTE 110 on base refractories also minimizes the non-metallic inclusion arising from the linings especially in case of aluminium and other non-ferrous metal casting thereby improving the quality of the casting considerably.

**\* Cost saving**

With the use of ECO - H COTE 110 as protective refractory coating, considerable cost saving is achieved because of savings in the fuel cost due to high emissivity and minimized heat losses due to tight sealing ability and increased working life of the refractories.

**Typical properties**

Appearance	:	Creamy liquid
Specific Gravity	:	2.35 to 2.40 gm/cc
Brookfield viscosity (Speed 10, spindle 5)	:	260 to 280 cps
ZrO <sub>2</sub> on dried film	:	58 % to 59 %

**Precautions:-**

1. Keep the mastic container air tight. Avoid exposure to heat and store at ambient temperature under a shed for better shelf life.
2. The mastic thickness and hardness on storage. However, can be brought to workable condition with a little mulling prior to use.
3. Ensure complete drying of mastic lining before use.

**Packing : 25 Kg bucket**

**ECO - H COTE 110: Protective refractory coating. Non-wetting to molten metals.**