

# **COVERALL-11**

(Exothermic Drossing Flux For Aluminium Alloys)

### PRODUCT:

COVERALL - 11 is Pinkish Colour powder made from Salts of Chloride & Fluorides recommended for cleansing and drossing operation.

#### FUNCTION:

It is used for forming a protective layer and for removing oxides , non desired Elements (Ca , Na; Li , Mg ) /non metallic inclusions from the molten metal.

During melting aluminium gets easily oxidised and forms aluminium oxide.

This layer of aluminium oxide is broken due to metal charging of ingots/scraps or for any other reason. The density of aluminium oxide is nearer to that of aluminium metal. Due to this density effect, it is difficult to separate oxide or better known as dross, from the metal.

This causes loss of metal due to dross formation and metal going along with the dross during dross removal and hence causes deterioration in quality of metal.

For this reason, melting is done under the cover of a flux which prevents dross formation and hence metal loss.

Since COVER AL-11 is mild exothermic in nature to use, it also helps metal in separation from oxide/dross as well as in removing non-metallic inclusions from the molten metal.

\*\*Quantity to be used is 0,3 KG for 1 MT MELTING FURNACE.

**\*\*Other fluxes have NaCl but Coverall-11 has KCl.** 

KCI, best separates metal from dross.

| PHYSICAL STATE & APPEARANCE | GRANULAR POWDER /PINKISH IN CLOUR |
|-----------------------------|-----------------------------------|
| ODOUR                       | ODORLESS                          |
| MELTING POINT               | 575 °C                            |
| SOLUBILITY IN WATER         | PARTIALLY SOLUBLE IN WATER        |
| MOLECULAR WEIGHT            | 239,72                            |
| DENSINTY                    | 2,1 gms/CC                        |
| PARTICLE SIZE               | GRANULES GENERALLY OF 1-3 mm      |
|                             |                                   |

#### PHYSICAL PROPERTIES:

## **CHEMICAL COMPOSITION:**

| NAME OF CHEMICAL          | COMPOSITION IN | %    | CAS NO     |
|---------------------------|----------------|------|------------|
| SODIUM CHLORIDE           | NaCl           | 30,0 | 7647-14-5  |
| POTASSIUM CHLORIDE        | КСІ            | 20,0 | 7440-09-07 |
| SODIUM SILICO FLUORIDE    | Na2SiF6        | 15,0 | 16893-85-9 |
| SODIUM ALUMINIUM FLUORIDE | NaAIF          | 15,0 | 15096-52-3 |
| SODIUM SULPHATE           | Na2SO4         | 10,0 | 7757-82-6  |
| SODIUM CARBONATE          | Na2Co3         | 10,0 | 497-19-8   |

#### **APPLICATION NOTE:**

Take requisite quantity of COVERALL-11 as recommended.

When melt is ready; add the recommend quantity (normally is 0,3 kg for 1MT) at a temperature  $680 \, {}^{\circ}C$  - 700  ${}^{\circ}C$  (Do not exceed 730  ${}^{\circ}C$ ), allow to stand for 10-15 minutes. After take dross from surface.

Do not mix ,not do immersed to depth.

**STANDARD PACKING:** 25 KG BAG.