



IS: 4308



CWL-7200176212

TEC Dry Chemical Powder (Ternary Eutectic Chloride)

Ternary Eutectic Chloride [TEC] based dry powder has been designed for use in fires involving highly reactive metals such as sodium, potassium and lithium. TEC-based dry powders are essential fire-fighting agents as they are stable, free flowing and easy to handle. Various base materials are used to formulate the dry powders, with either a single or multiple bases.

Metal fires pose special problems to the fire fighting operations as water or foam cannot be used as fire extinguishing agent because some metals react violently with water even at room temperature. Ordinary dry chemical powders are not suitable for fighting metal fires.

TEC powder fuses at temp. of 600– 650 °C and has high latent heat of fusion. The powder absorbs heat from burning metal & forms a hard crust on surface, which provides blanketing effect, thereby cutting off Oxygen and heat radiation from burning metal surface. Chloride radicals of powder react with free radicals of metals responsible for fire propagation, resulting retardation of chain reaction. The unique composition of ternary eutectic chloride of alkali metals gives fast & effective fire knock down capability, which cannot be matched by ordinary mixtures of chloride salts or phosphate base powders.

Application

TEC powder should be applied gently, through diffuser of fire extinguisher or through an automatic powder dispensing systems. High pressure may splash the burning metal & fire may start at other place. Dry powder can also be manually applied on burning metal by a scoop, shovel or a plastic bag. Care should be taken to cover the surface completely without pinholes and then be left undisturbed for at least 30 to 45 minutes.

STORAGE AND SHELF LIFE

It has min. 3 years shelf life, considering tropical conditions & if properly stored in original Packing. Refer Technical Bulletin for storage guidelines. It can be safely stored up to 49 °C, With intermittent exposure up to 60 °C. The container should be protected from direct Sunlight & moisture.

COMPATIBILITY:

TEC is foam compatible and can be used in twin application system.

PHYSICAL AND CHEMICAL PROPERTIES

PROPERTIES	AVERAGE VALUES
Appearance	Off white Powder
Colour	Off White
Apparent Density gm/ml	1.00 – 1.04 gm./cc
Moisture Content, Max	0.5%
Water Repellency, Min	3%
Fluidity, gm/sec, Min	50gm/sec

STANDARD PACKING

Standard packing are in 5 kgs./10 kgs./25 kgs./50 kgs. (net wt) hermetically sealed polyethylene bags. For safe transportation these bags may be packed in mild Steel Drums / High Density Polythene Drums of suitable sizes if required by Customer.

FIRE FIGHTING EQUIPMENT



Manufactured by

UNITED FIRE & SAFETY SERVICES

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