

# KV-LITE POWEREX

FORMERLY KNOWN AS: **KV-OLFEX**



## POTASSIUM BI-CARBONATE UREA REACTION COMPLEX

KV LITE POWEREX is a dry chemical powder based on Potassium Allophonate, a reaction product of Potassium Bi-Carbonate-Urea. It was developed, registered and patented by Scientists of ISRO, Dept. of Space-Govt of India. We are licensed to manufacture this product under Technology Transfer Agreement.

### EXTINGUISHING MECHANISM:

It possesses the unique property of decrepitation where powder particles breaks down into large number of minute particles in the flame zone thereby surface area of the powder in the combustion zone increases manifold.



Fire extinguishing efficiency is dependent on the rate of removal of free radicals, which is directly proportionate to the surface area of contact i.e. larger the surface area of powder; faster is the extinguishment.

Large surface can also be achieved by grinding the powder to very fine size. But fine powder will pose problem of compaction during storage & also the projection difficulties. Further, there is limitation beyond which powder cannot be ground. This limitation is overcome by decrepitation property of KV LITE POWEREX, unattainable by other conventional powders.

### CREDIBILITY:

KV LITE POWEREX with unique decrepitation property gives fast flame knockdown with **APPLICATION DENSITY of 0.61 kg/m<sup>2</sup>, tested and approved by UL-USA.**

**It also confirms to parameters in OISD 116, Section 12.**

Product is tried, tested & proven for its satisfactory performance since more than a decade.

It is in service of vital sectors - Refineries, Petrochemicals, Airports, Port Trusts, Oil fields, Gas Pipelines, Steel Plants, Power Plants etc. protecting high investments and precious lives.

### APPROVALS :

- Underwriters Laboratories UL 299C
- ISRO, Govt. of India
- By any Third Party Inspecting Agency like Lloyds, DNV, BV etc
- Manufacturing & Quality System to ISO 9001:2008 & ISO 14001:2004
- Our In House R &D facility is approved by Govt. of India, (DSIR)

### ALSO CONFIRMS TO:

- European standard EN 615 & EN 3
- International Standard Organisation - ISO: 7202

### APPLICATION:

It can be used in conventional Portable Extinguishers, Wheeled Units, Fire Trucks, Fixed Installations & Powder Cannons. Its Apparent Density is low; hence required charge in extinguisher will be approx. 60% lower.

**COMPATIBILITY:**

KV LITE POWEREX is foam compatible and can be used in twin application system.

**STORAGE & SHELF LIFE :**

Rigid quality control ensures KV LITE POWEREX withstand extreme climatic conditions and remains free flowing with no loss of properties throughout the shelf life. The container should be protected from direct sunlight & moisture. It can be safely stored upto 49 °C, with intermittent exposure upto 60 °C.

It has min. 7 years shelf life, considering tropical conditions & if properly stored in original packing. Refer Technical Bulletin for storage guidelines.

**ECOLOGY:**

KV LITE POWEREX is environmentally friendly as all RM & finished products are non-toxic. For long period of exposure, mask should be used. It does not have corrosive or abraasive effect. Powder should be washed from the skin and eyes immediately after contact. Refer Material Safety Data Sheet for guidelines.

**TECHNICAL PARAMETERS:**

PROPERTY	VALUES
APPEARANCE	White coloured free flowing powder
APPARENT DENSITY	0.55 - 0.7 gm./cc
WATER REPELLENCY	< 1.5 %
MOISTURE CONTENT	< 0.25 %
FLOWABILTY	> 50 gm./sec.
AVERAGE PARTICLE SIZE	55-65 microns
APPLICATION DENSITY**	0.61 kg. /m <sup>2</sup>

\*\* Application Density is the measurement of fire fighting capacity of the powder

**PACKAGING :**

KV LITE POWEREX is packed in 25 kg HMHDPE drums stretch wrapped on pallets for sea transport.

**RELIABILITY:**

KV LITE POWEREX is produced to rigorous quality control standards according to UL specification. Our In House R &D facility is approved by Govt. of India, (DSIR).

**EMERGENCY SERVICE :**      **HELP LINE**      **+ 91 9225124508**

- The above data is given in good faith and for general guidelines only.
- We can match the product to your specifications and/or any applicable standards.
- The right is reserved to vary or modify any specification without prior notice.

**K. V. FIRE CHEMICALS (I) PVT. LTD.**

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