

TECHNICAL DATA SHEET

Silica Fume



Con-Fume®

Product Code: K-811

DESCRIPTION

Con-Fume® is a pozzolanic material used to produce high performance concrete or mortar possessing increased strength, impermeability and durability. Con-Fume reacts with the hydration products of Portland cement, forming calcium silicate hydrate gel, which enhances strength and durability by consuming the weaker calcium hydroxide.

FEATURES & BENEFITS

- Meets all CSA A3001-13 specifications for a Type SF silica fume supplementary cementing material.
- Meets all ASTM C1240-14 specifications for silica fume supplementary cementing material.
- Specially developed to provide enhanced bulk material flow and handling characteristics, providing efficient bulk transportation and pneumatic unloading.



RECOMMENDED USES

Con-Fume is recommended for high performance ready mix and precast concrete applications.

PROPERTIES

Physical Properties	
Appearance	Light Grey Powder
Specific Gravity, CSA A3004-13-A4	2.2
Bulk Density	600 – 650 kg/m ³
Fineness, CSA A3004-13-A3, (45 µm retained)	1 – 3 wt % retained
Soundness, CSA A3004-13-B5, (autoclave)	0.01 - 0.05 % Expansion
Tendency to entrap air, CSA A3004-13-A5	No
7 day Pozzolanic Strength Activity Index, ASTM C1240-14	120 - 127% of control
BET Fineness, ASTM C1240-14 (specific surface)	18 -21 m ² /g
Chemical Properties	
Silicon Dioxide (SiO ₂), CSA A3003-13	89 - 95 wt %
Aluminum Oxide (Al ₂ O ₃), CSA A3003-13	1.0 - 2.0 wt %
Calcium Oxide(CaO), CSA A3003-13	0.9 - 1.5 wt %
Iron Oxide (Fe ₂ O ₃), CSA A3003-13	1.5 - 2.5 wt %
Magnesium Oxide (MgO), CSA A3003-13	0.5 - 1.0 wt %
Total Alkali (as Na ₂ O eq.), CSA A3003-13	0.5 - 0.9 wt %
Sulphur Trioxide (SO ₃), CSA A3003-13	0.1 - 0.5 wt %
Loss On Ignition (LOI), CSA A3003-13	2.5 - 5.0 wt %
Moisture Content, CSA A3003-13	0.1 - 0.5 wt %

*Independent third party certificate available.

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APPLICATION

Con-Fume is very fine and dust may cause eye and respiratory irritation. Use good industrial hygiene practices (i.e. wear goggles and approved usage dust mask). For further handling and safety instructions, please consult the Safety Data Sheet (SDS).

LIMITATIONS

Con-Fume performance is affected by many factors including storage, method and conditions of application and use. User testing is ESSENTIAL to determine suitability of product for intended method of application and use.

SAFETY

Read the Safety Data Sheet (SDS) for this product. For professional use only. Avoid contact with skin or eyes. Avoid breathing dust. Wear long sleeves, safety goggles and impervious gloves.

PACKAGING

Con-Fume is available in 11.4 kg (25 lb.) mixer ready bags, 1,000 kg (2,204 lb.) bulk bags and bulk pneumatic.

WARRANTY

Kryton International Inc. (Kryton) warrants that Kryton products are free from manufacturing defects and comply with the specifications given in their respective technical data sheet. Because conditions of use, such as site conditions, surface preparations, workmanship, concrete ingredients, weather, structural issues and other factors are beyond the control of Kryton, no warranty can be given as to the results of use. Purchaser agrees to seek the advice of qualified professionals and to determine for themselves the suitability of the products for their intended purpose and assumes all risks. Purchaser's sole remedy is limited to replacement of any product proven defective or at Kryton's option refund of the purchase price paid. THIS LIMITED WARRANTY CONTAINS THE ENTIRE OBLIGATION OF KRYTON. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. KRYTON SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. No representative of Kryton has the authority to make any representations or provision except as stated herein. Kryton reserves the right to change the properties of its products without notice.