



Product Information Sheet

# LITHKEM ULTRA S

**Lithkem Ultra S** is a specially formulated powder accelerator that has been designed to reduce setting times and increase early and final strengths in Self-Levelling Underlayments (SLU).

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# DESCRIPTION

**Lithkem Ultra S** is a cost effective, accelerator designed to increase the hydration of both CAC and OPC, producing rapid setting times, faster drying times and increased early and final flexural and compressive strengths.

**Lithkem Ultra S** increases the formation of calcium aluminate hydrates and calcium silicate hydrates in OPC/CAC binder systems and increases the formation of ettringite in OPC/CAC/CS binder systems. **Lithkem Ultra S** can also be used to accelerate Calcium Sulfoaluminate (CSA) cement. **Lithkem Ultra S** is optimised to prevent surface spotting on SLU's, improving surface appearance.

# BENEFITS

Key benefits of **Lithkem Ultra S** are:



**RAPID  
SETTING TIMES**



**FASTER  
DRYING TIMES**



**IMPROVED SURFACE  
APPEARANCE**



**ENHANCED EARLY  
AND FINAL STRENGTHS**



**EFFECTIVE IN OPC-RICH,  
CAC-RICH AND CSA  
FORMULATIONS**



**COST-EFFECTIVE  
ALTERNATIVE TO LITHIUM  
CARBONATE**



# APPLICATIONS

**Lithkem Ultra S** has been designed to significantly reduce the setting and drying times in SLU's and is particularly effective in OPC-rich formulations and can also be used in CAC-rich formulations. It is suitable for use with all cement types and hydraulic binders, including ground granulated blast-furnace slag (GGBS), pulverised fly ash (PFA) and gypsum. **Lithkem Ultra S** can be used on its own or together with Cemkem's retarder range\*

*\*See Cemkem's Revokem range.*

# ADDITION RATES

The optimum dosage is dependent on mix design, binder content, ambient temperatures and requirements for open and set times. Natural variations found in hydraulic binders will also affect the required dose.

For typical applications:

- **0.1 - 0.5%\* by weight of formulation**

*\* The optimum dose should be determined by completing appropriate laboratory trials.*



# STORAGE

Lithkem Ultra S should be kept dry and between 5°C and 30°C avoiding extremes of temperature and moisture. Avoid freezing and do not store in direct sunlight.

If stored correctly in sealed packaging, this product has a minimum shelf life of 12 months.

# PACKAGING

Lithkem Ultra S is supplied in 20kg bags.

# HANDLING

Full MSDS available on request. H302: Harmful if swallowed. H319: Causes serious eye irritation. Wear protective gloves/protective clothing/eye protection/face protection.



## TECHNICAL DATA

**Composition**

Inorganic compounds

**Appearance**

Fine off - white powder

**Bulk Density (g/ml)**

Approx. 0.65

Cemkem is part of the Rakem Group. The Group specialises in the distribution of raw materials and formulated products to the coatings, construction and chemical industry.



**Chemical distributor to  
the coatings, plastics and  
inks sector**



**Confidential toll  
manufacturer of water-  
based products**



**Specialist distributor to  
the cement and  
horticulture sector**

With over 20 years experience within the construction industry, Cemkem's product portfolio has been formulated to enhance and improve construction products, with the aim to benefit the manufacturer, the customer and most importantly the end-user. The Group aims for consistent and constant development across all raw materials and finished products.