

Product Data Sheet
Edition 07.2014
Identification No. CA - 30



PROASH

High Quality Classified Fly Ash For High Performance Concrete

Description

PROASH is a pozzolan for concrete, consisting of the finally divided residue that result from the consumption of ground or powdered coal . the bulk of the particles formed are microscopic spheres. Light Grey in Color, and are of a much more rounded particle shape than Portland cement. A pozzolan reacts chemically with calcium hydroxide produced from the hydration of cement to form additional cementitious content.

Standards:

complies with ASTM C618 & BS 3892 part 1 .

Where to use

PROASH can be used as a pozzolan in any concrete application.

PROASH used to control the heat of hydration of concrete and risk of thermal cracking in large structures .

- It is beneficial in high performance concrete application .
- It is effective at mitigating problems associated with (ASR) reaction.
- In mass concrete placement such as dams, power stations and concrete oil rigs.
- To high strength pre-cast and pre-stressed concrete.

Advantages

PROASH provides the following advantages:

In plastic concrete:

- Provides easier placement.
- Reduced bleeding of mix water to the surface and the reduction or elimination of segregation of the aggregates from the cementitious paste.
- Reduces drying shrinkage & creep.
- Improved finishability.
- Improves pumpability.

In hardened concrete:

- Increases the ability of concrete to resist sulfates attack & ASR reaction.
- Increase ultimate strength .
- Lowered heat of hydration to prevent cracking in large volume, mass pours..
- Greater resistance to acids and chemical attack.
- Reduced permeability to liquids.

Properties

Specific Gravity	2.53
Typical mean particle size diameter	25 µm

How to use

Theoretical dosage rate:

Mix designs containing 5 to 20%

PROASH based on proportioned cement weight. Are common to achieve the desired fresh and hardened concrete properties.

Mixing:

PROASH is added with the cement to the concrete at the batching plant before the gauging water.

Application:

Low dosages (<5%) of white **PROASH**. May actually perform as a mild flow enhancer, replacing and freeing water from between cement grains. At higher dosages white **PROASH**. Will have a negative water demand on the mix and will require the use of water reducing admixture to control slump and workability as (**KEMFLOW SUPER FM**). White concrete in addition to architectural applications is commonly used for light reflectivity and safety go hand – in – hand while improving durability properties white **KEMFUME** will not discolor specially colored mortars, grouts, architectural casting.

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Optimum mixing time 2 minutes .The water quantity should be measured carefully according to the final consistency needed. **PROASH** concrete should be handled and placed as conventional concrete.

Curing:

PROKEM recommends the concrete be cured for 24 hours after finishing operations are complete by using **KEMCURE** curing compound. spray applied surface contact curing membranes should be used in all cases.

Compatibility:

All admixtures may be used in the same concrete batch with **PROASH**.

Cleaning:

Spillage of **PROASH** with concrete can be removed with water.

Packaging:

Available in 25 kg packs and 500 kg drums.

Shelf life & Storage:

Unlimited, it must be stored in dry conditions.

Health and Safety

- **PROASH** is non-toxic.
- Use gloves to avoid contact with skin.
- Wear a face mask against dust if there is a heavy dust development.
- If skin comes in contact, wash immediately with soap and water.
- Do not dispose of into water of soil but according to local regulations.
- Do not use solvents.
- Eye contamination must be immediately washed with water, then seek medical treatment.
- Non – hazardous, no problems during transport.

Additional Information

PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure.

PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction, **PROKEM** extends technical services to include after sales support to assist users in a proper handling of our products.

PROKEM representative must be present at the job site during placement of the first batch of treated concrete. Do not proceed without this representative being present for certification.

Environmental Considerations

PROASH is environmentally safe .