# Safetard Gel

Technical Specifications

## Water Based Surface Retarder for Application to Concrete Mould Face

SAFETARD GEL has been formulated to retard or slow the set of the surface cement content within the fresh concrete that comes into contact with it. It is suited for the production of exposed aggregate finishes or 'keyed' surfaces for construction joints. Safetard Gel is a transparent blue gel in appearance. This is done to visually assist application. The optimum stripping time for Safetard gel is between 16 to 22 hours after casting. Jet washing the concrete surface after this time should expose to a depth between 3 –5mm (for regular concrete). Safetard Gel can be formulated to give exposure depths between 1mm and 8mm.

## Advantages

- Easily applied by brush to all formwork types
- Weather resistant
- Single coat application
- Concrete can be applied immediately or later
- Non staining
- Water based with no flammable or toxic constituents. Fully Biodegradable, No VOC's
- Any residue on formwork is easily removed
- Can be used on vertical surfaces
- WRAS approved product

## Application

**Formwork Preparation**

Best results are achieved on a mould face that is clean, dry and free of any surface deposits. For high absorbing mould faces it is recommended that a very light mist coat of SAFELEASE Release Agent be applied to the mould face and allowed to dry thoroughly before application of SAFETARD GEL. This will allow a uniform layer of SAFETARD GEL to be applied to the surface.

**Application**

It is possible that on prolonged storage partial separation of the constituents may have occurred; therefore it is advisable to lightly stir the material before use. Apply carefully and uniformly by brush or roller in temperatures above freezing. When applying to construction joint surface be careful not to apply to exposed reinforcement—any accidental contact of the gel to the reinforcement must be immediately cleaned off with a cloth, Concrete may be placed immediately if care is taken to avoid displacing the SAFETARD GEL, if left it will dry to produce a surface that is resistant to rain. After use care should be taken to remove all traces of the SAFETARD GEL by washing, prior to re-use.

**Placing Concrete**

On horizontal pours the concrete should be placed evenly across the surface. If the concrete is poured from one end only and moved across the face a heavy scouring action results which could remove or displace the Safetard Gel from the mould face. On vertical pours the mould face should be protected from concrete splashes. This is best achieved by use of a termite or a sheet placed in the mould and withdrawn gradually as level of concrete rises.

**Stripping Moulds**

Time before stripping is dependent upon the numerous factors which affect the rate of hardening of concrete. In general stripping is recommended be within 18-22 hours. For longer periods or where an accelerated method of hardening is adopted tests should first be made on trial panels to establish the optimum stripping time.

**Removal of Retarded Matrix**

Contact with the air stiffens the surface of the retarded sand/cement matrix. Therefore removal of the matrix should be as soon as possible after stripping of mould. The stiffening factor can be used to reduce depth of aggregate exposure by delaying removal of matrix for a period established by trials. Removal of retarded matrix should be by low pressure water jetting and broom or wire brushing in two directions at right angles to each other.

**Cleaning Equipment and Moulds**

Clean brushes and rollers immediately after use with water. Any retarded matrix adhering to mould face should be removed as soon as possible by first softening with water and then scraping with a flat bladed scraper

## Coverage

A typical coverage is of 3-5 $m^2$ per litre. Actual rate will depend on surface texture and porosity



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## Storage

Protect from Frost, but if the material should freeze in the container then lightly agitate container after thawing to ensure thorough remixing.

## Shelf Life

12 months in sealed containers from date of manufacture.  Must be used 2 months after opening.

## Specification

Safetard Gel is manufactured by Adomast Manufacturing Ltd and shall be applied strictly in accordance with the manufacturer's instructions. For specific advice regarding any aspect of this product, please consult our Technical Department

## Health and Safety

The material is non-flammable and is not considered hazardous. If splashes enter the eyes irrigate immediately with copious quantities of clean water. If irritation persists seek medical attention without delay. Hands should be cleaned with soap and water after use..

See separate Safety Data Sheet for further information.



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