

# Concrete Surface Retarder for Vertical Surfaces

## ETCHING GEL

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### TECHNICAL DATA

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#### 1.0 DESCRIPTION

ETCHING GEL is a water based gel for use as a concrete set retarder on vertical and horizontal formwork. It prevents concrete setting (curing) for up to 48 hours and to a retarded depth of up to 10mm depending on concrete strength. This allows the retarded concrete to be removed by hose and/or brush after the forms have been stripped, resulting in an exposed aggregate finish.

#### 2.0 PHYSICAL PROPERTIES

2.1. Colour	Off-white gel like paste
2.2. Specific Gravity	1.1
2.3. Flash Point	~40°C
2.4. Viscosity	High, easily brushed out gel. Lower viscosity available.
2.5. Toxicity	Harmful substance. Contains Methylated Sprits.
2.6. D.G. Classification	3, UN 1993 Flammable Liquid, N.O.S.
2.7. Shelf Life	Unlimited in original sealed containers as supplied
2.8. Coverage	5 - 6 m <sup>2</sup> /litre surface dependent

#### 3.0 USES

- ETCHING GEL is used to create a mechanical key on a concrete surface which is to have more concrete poured against it. An example of this is where ETCHING GEL is painted on stop ends which confine individual pours of a floor slab. When the stop ends are removed and the retarded concrete is washed off, the resultant exposed aggregate finish makes an excellent key for the next pour.
- ETCHING GEL can also be used to create an architectural exposed aggregate finish on columns, beam panels, pavers and any other formed concrete surface.

#### 4.0 APPLICATION INSTRUCTIONS

- Etching Gel may develop flammable vapours if heated above 40°C. Apply in a well-ventilated area and avoid open flames. No smoking. Keep away from ignition sources. Store in a cool location (15 – 25 degrees C).
- Apply by soft brush. Scoop out a quantity of ETCHING GEL and paint out to an even coating. If necessary, a second coat can be applied after about 10 minutes. Allow to dry before pouring concrete.
- ETCHING GEL has no release value so that forms should get normal treatment with DISCRETE before application. This will prevent any build up on the stripped forms sticking after the retarded concrete has eventually set.

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## TECHNICAL DATA Continued

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### 4.0 APPLICATION INSTRUCTIONS (continued)

- 4.4 Normal concrete placed at normal temperatures should be removed within 48 hours. High strength concrete or concrete placed at higher temperatures will not be retarded for as long and consequently should have forms stripped and retarded concrete removed within 24 hours or sooner as determined by testing the effectiveness of ETCHING FLUID with the proposed concrete mix.
- 4.5 Treated formwork will withstand a shower, but not heavy rain, as the ETCHING GEL is soluble in water.
- 4.6 Upon removal of the formwork, preferably within 24 hours, the concrete surface must be brushed and washed immediately with low-pressure water. Much of the unset surface mortar will stick to the form during the stripping operation. This soft mortar is easily removed by water jet and a stiff broom.
- 4.7 Multiple coats of ETCHING GEL increase the dry film thickness and depth of retardation. If unusual aggregate sizes are being used and/or high strength concrete, it is advisable to make preliminary tests to determine the correct depth of retardation.
- 4.8 Due to Methylated Spirits content wear protective clothing, and avoid skin contact. Refer to product safety data sheet for complete information.
- 4.9 Accelerating admixtures and hot weather all reduce the effectiveness of ETCHING GEL. Check suitability of ETCHING GEL performance with steam curing of concrete prior to widespread use.
- 4.10 Protect from frost.

### 5.0 PACKAGING

20-litre pails



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