

TUFFACURE

R90/AL

RESIN BASED CONCRETE CURING MEMBRANE, 90% EFFICIENT.

DESCRIPTION

TUFFACURE R90 resin type curing membranes are used to protect freshly placed or formwork cast concrete from excessive water loss during the critical curing period and should be applied as quickly as possible to ensure maximum benefit. They assist the Contractor to achieve maximum strength and durability with correct mix design and minimise surface shrinkage cracks and dusting effect. This protection is achieved by spraying onto the fresh concrete surface **TUFFACURE R90**, which rapidly forms an impermeable skin of resin over the concrete surface. This resin film will on weathering and/or attrition gradually disintegrate leaving a stain free surface. An aluminised version **TUFFACURE R90AL** is also available for use on PQ concrete, runways or thin decks & slabs for reflecting suns heats & rays, to prevent surface crazing & cracking.

ADVANTAGES

- **TUFFACURE R90** provides a labour saving method of ensuring all fresh concrete is cured properly, without the use of 'ponding' techniques, or the continuous wetting of hessian stretched over the concrete surface.
- When used in accordance with instructions it will disintegrate and flake off from the concrete surface over a period of time depending upon prevailing atmospheric conditions.
- Ingredients remain in suspension and no special pre-use agitation is required.
- The incorporation of an aluminium pigment in **TUFFACURE R90AL** reflects heat and light .
- Only a single application is required.
- Eventual finish and colour of concrete is unaffected by use of **TUFFACURE R90** materials.
- Materials supplied ready to use in factory sealed containers to specifications.

PROPERTIES

Appearance:	Clear to light amber, mobile liquid.
Odour:	Characteristic solvent
Freezing Point:	-15°C
Flash Point (PMCC)	38°C
Storage Life:	Minimum 12 months in manufacturer's sealed drums.

STANDARDS

TUFFACURE R90/R90AL when applied at a coverage rate of 5.0m² per litre achieves a curing efficiency greater than 90% when tested in accordance with BS 7542 'Method of tests for curing compounds for concrete'.

TUFFACURE R90/R90AL when applied at a coverage rate of 5.0m² per litre and tested in accordance with Clause 1027, Specification for Highways 1991 (BS 7542 1992) has an efficiency index greater than 90%.

TUFFACURE R90/R90AL complies with the requirements of ASTM C309-91 Type 1 Class B.

When tested in accordance with ASTM C156-93 **TUFFACURE R90/R90AL**, applied at a coverage of 5.0m² per litre, restricts the water loss to not more than 0.55Kg per m² of surface, in 72 hours.

SUBSTRATE QUALITY & PREPERATION

TUFFACURE R90/R90AL should not be sprayed onto surface dry concrete, otherwise the normal mechanism of degradation will be seriously impaired which may result in staining. Therefore, in some instances where the concrete has lost some of its 'greenness' it is essential to dampen the surface with water. However, **TUFFACURE R90/R90AL** should not be sprayed onto concrete which has obvious free standing water on it.

APPLICATION

TUFFACURE R90/R90AL are supplied ready to use and should not be diluted.

Low pressure spraying is the preferred method, sprayers such as the Gloria Special 410T with an 8004 tip fitted are recommended for this application. Suitability of other spraying equipment should be confirmed by trials.

When sprayed, the nozzle should be approximately 500mm from the surface and passed back and forth to ensure complete coverage. A constant pressure on the pump must be maintained at all times to produce a fine mist spray.

It is important that the product is uniformly applied @ a rate of 5m² per litre without thick or ponded areas, which will adversely affect the quality of finish.

Application is one coat,

Apply in well ventilated areas only. Care should be taken during application in high ambient temperatures and or windy conditions to avoid skin and respiratory contact.

Substrate temperatures must be above 5°C and below 30°C.

As with all resin systems do not apply if it is raining or if rain is likely. Do not apply unless the substrate is at least 3°C above dew point, as condensation and/or blooming may occur.

TUFFACURE R90AL may require agitating before use as the small aluminium particles settle out over time.



TUFFACURE

R90/AL

**RESIN BASED CONCRETE CURING
MEMBRANE, 90% EFFICIENT.**

COVERAGE

For curing freshly laid concrete, apply @ 5m²/litre. product should be applied by fine spray, from a low pressure unit, the ideal sprayer is a Gloria 410T with an 8004 nozzle fitted

For curing freshly laid concrete, apply @ 5m²/litre.

CLEANING

Spray equipment should be dedicated for use with **TUFFACURE R90/R90AL** and must be thoroughly cleaned after each use using **SOLVKLEEN** or other proprietary solvent cleaner.

Hardened and cured material can only be removed mechanically.

STORAGE & HANDLING

TUFFACURE R90/R90AL in manufacturer's sealed drums requires no special storage facilities.

TUFFACURE R90AL may require agitating before use as the small aluminium particles settle out over time

Minimum 12 months in manufacturer's sealed drums.

Keep away from naked flames, foodstuffs and children.

PACKAGING & TRANSPORT

TUFFACURE R90/R90AL is supplied in 25ltr and 205ltr Drums.

Regulated for Road Transport

HEALTH & SAFETY

Refer to separate material safety data sheet. Copies available on request.

When spraying, care should be taken to minimise inhalation and contact with eyes and skin.

Material should be applied in well ventilated areas.

QUALITY ASSURANCE

Direct Chemicals is a firm of assessed capability. The Company's quality system conforms to BS EN ISO 9001:2000 and is assessed by QMS International PLC. Products are manufactured under quality assured schemes

Direct Chemical products are guaranteed against defective materials and manufacture. Products are sold subject to the Direct Chemical Terms and Conditions of Sale, copies of which are available on request. Direct Chemicals endeavours to ensure that the above data and any further advice is correct, however Direct Chemicals can not accept liability for the use to which products are put or the way in which they are used. All recommendations stated by the company are made in good faith. Recommendations do not over-ride the basic obligation of the user to satisfy themselves at all times as to suitability of the product for their particular application.

