



DEVELOPMENT RESINS ADMIXTURES CONCRETE

DRACO ITALIANA s.p.a.

SEDE E STABILIMENTO:

Via Montegrappa, 15 - 20067 TRIBIANO (MILANO)

Tel. 02/90632917 r.a.

Fax Simile 02/90631976 - Tlx. 341118 DRACO I

## IDROSILOXAN

PROTECTIVE WATEROUS HYDROFOBIOUS TWO-COMPONENT PRODUCT FOR CONCRETE AND BUILDING MATERIALS.

IDROSILOXAN is a special new product which acts differently from the traditional film products, is able to penetrate deeply in materials to be treated, realising in this way a hydrofobic product that does not modify the exterior aspect and the permeability to the water vapour.

The supports treated in this way remain intact, perfectly transpiring, hence, permitting the progressive drainage of the contained humidity. Furthermore, the impregnation of the support realised using IDROSILOXAN not only eliminates the capillar attraction in regards of typical water of porous construction materials, but inverts it, in this way the capillary forces act in manner to contrast the penetration of water in the support even if the same is subject to hydrostatic pressure.

IDROSILOXAN is capable to grant an optimum penetration, hence, a long protection, in particular for concrete structures, due to the fact that, when blocking the entry of water and aggressive agents in it contained, prevents or reduces drastically the degrading effect coming from:

- Chloride and sulphate attacks.
- Alkali-aggregate reactions
- Formation of Ethingite and Thaumasite
- Freeze-thaw cycles

On practical and applicative experience, IDROSILOXAN is designed in a way to remain hydrofil, in comparison of water contained in the support and hence to penetrate in the porosity of the hydrofobic material in successive phases.

Optimum results are obtained when compared to concretes and armatures saturated with water.

In this way it is possible, with evident site application advantages, the realization of an efficient hydrofobic action even on humid supports.

Ending, we underline the fact that IDROSILOXAN is a product based on water solvent, hence totally ecological.

### ADVANTAGES

The absorbing mineral materials treated with IDROSILOXAN is characterised for :

- granting the hydrofobic effect in the time
- possible application on high or medium alkaline supports.
- no chromatic superficial variation.
- optimum transpiration to water vapour
- resistance to acids, alkalines and salts present in the water permeability with consequent increase of durability.
- reduction of the thermic acoustic conductivity of the mineral conglomerates.
- resistance to freeze-thaw cycles.
- resistance to U.V. rays.
- rapid drying and absence of sticky elements.
- absence of residual-products reaction.
- the use of an ecological and not polluting substances.

IDROSILOXAN is advisable for massive or superficial hydrofobic treatment, for principal materials of normal civil use (for any inquiry, please consult *Draco Italiana S.p.A.*).

### PREPARATION OF THE PRODUCT

The product is supplied pre-dosed in two packings (Component A and component B).

Pour the component B in the container of component A and mix with mechanical mixer of low velocity for at least 5 minutes verifying that the product after mixing is presented transparent and not matt colour.

If the solution seems turbid and unusable - take care not to confuse the eventual light opalescence that could be provoked from air absorbed during the energetic mixing, hence does not jeopardize the efficacy of the product. The pot life time after mixing is of maximum 6 hours.

## APPLICATION

IDROSILOXAN could be used for superficial or massive hydrofobic action.

In case of superficial hydrofobic treatment it is advised to treat vertical or strongly inclined surfaces previously cleaned from soluble salts and dirt, taking good care to eliminate the parts of scarce adherence to the support by means of brushing and/or hydro-sand blasting machine.

Cracks or fessures superior to 0,3 mmj should be absolutely sealed.

Apply the product possibly on dry surfaces.

In case of washing the surface to be treated, application should be made not before 3 days.

IDROSILOXAN should be applied on walls through low pressure sprinkling (0,3 BAR) or by brushing having good care in saturating the support.

It is necessary, during the treatment, to protect the surrounding vegetation and/or wood, glass, metal and plastic surfaces.

In case of accidental contamination, wash carefully with much water.

The hydro-repellent effect is manifested after several hours from the application.

In case a massive hydrofobic action is to be realised, as example the formation of a chemical barrier "cutwall", IDROSILOXAN should be applied using the injection method.

Execute a serie of regular inter-axis holes (indicatively 15÷30 cm) and insert in same the injectors, fixing them with and epoxidic paste type EP.FIX (or alternatively use the usual injection packers).

Successively inject IDROSILOXAN with pressure not exceeding 3 atm (this should be considered evaluating the porosity and mechanical characteristics of the support).

The necessary consumptions to obtain an efficient massive hydrofobic action depends from nature and conditions of the support. Hence, it is advisable to execute preliminary verifications of impregnation/hydrofobic action on samples picked up from the same support.

## PRECAUTIONS & RECOMMENDATIONS

The component B of IDROSILOXAN is flammable and should be kept far away from free flames , sparkling and heat sources. In case of fire, it could be extinguished using a normal CO2 extinguisher or a slight throw of splashy water.

Even if IDROSILOXAN is not Toxic or harmful it is advisable to observe the standard security normes concerning the use of chemical products.

In case of accidental contact with the skin, eyes and clothes, wash immediately with much water and eventually contact a Doctor.

IDROSILOXAN is a pre-dosed product, hence, must not be diluted with solvent or water.

## PACKAGING

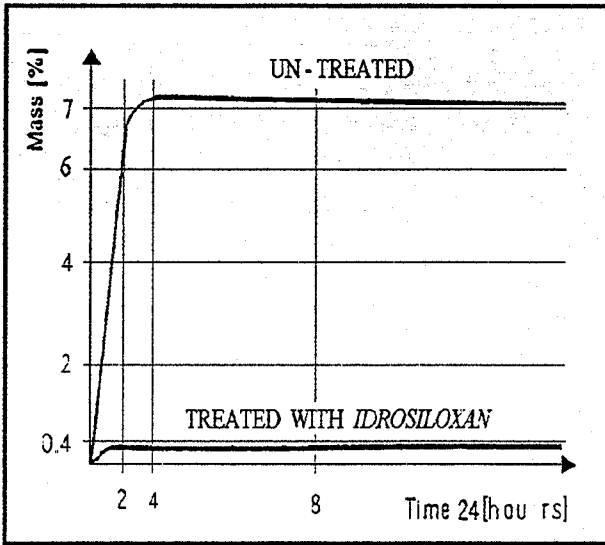
IDROSILOXAN is supplied in metal and plastic buckets (A + B) = Kg (7.5 + 0.5)  
or Kg ( 15 + 1 ).

## WAREHOUSING

The product in its original packing in two separate confections has a pot life of almost one year, if stocked and conserved in fresh and dry ambient, far away from any kind of heating sources. Should be preserve from humidity.

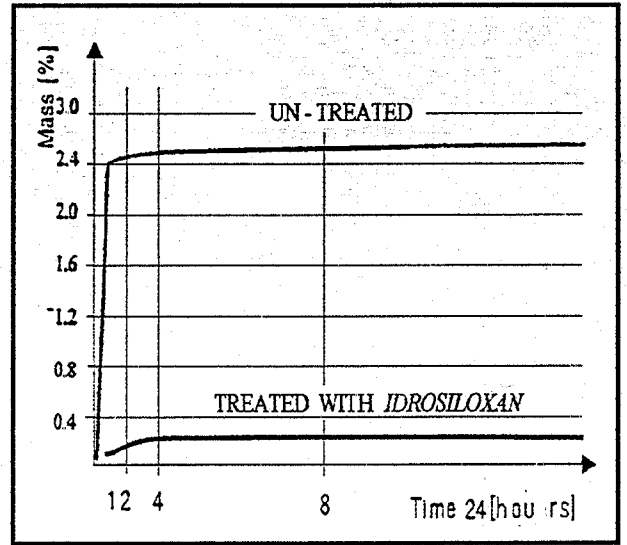
**DATI TECNICI**

N° of components	2
Colour	transparent
Mixing ratio	15:1
Specific weight (25°C)	1 kg/dm <sup>3</sup>
Viscosity (25°C)	0,9÷1 mPa s
Boiling - point	>100°C
Flammable point (comp. B)	35
Application temperature	+5÷35°C



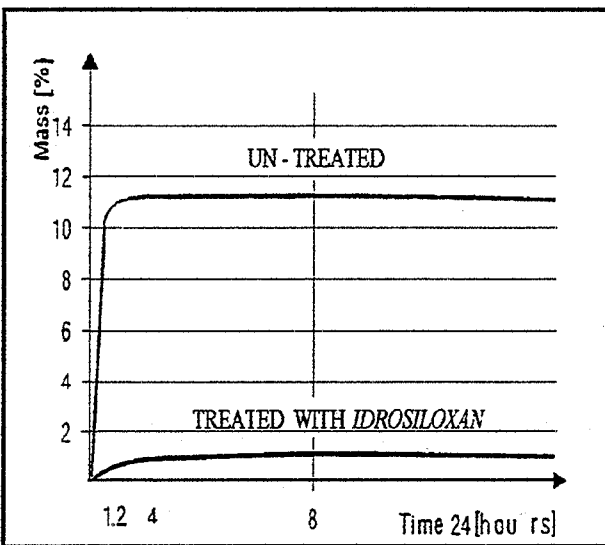
**Absorbition of concrete ("Fattening hog")**

Hydrostatic pressure: 10 cm H<sub>2</sub> O



**Absorbition of concrete water R<sub>250</sub>**

Hydrostatic pressure: 10 cm H<sub>2</sub> O

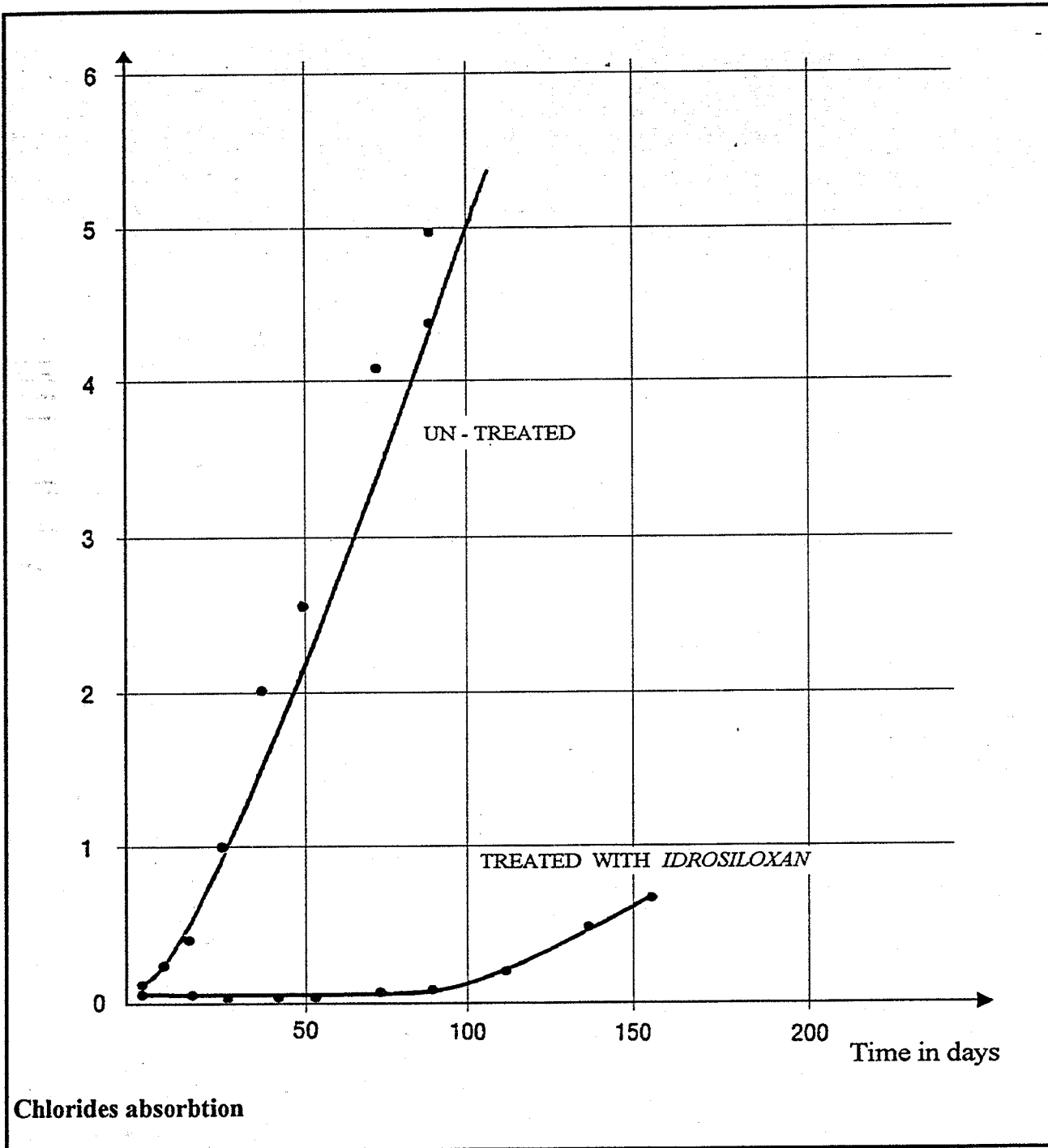


**Water absorbition of earware bricks**

Hydrostatic pressure: 10 cm H<sub>2</sub> O



# IDROSILOXAN



Chlorides absorbtion

DM 10-94

Request of trade mark registration n° 8112C/87 del 1987

The present edition cancels and replaces the former one

Le indicazioni di questa scheda tecnica sono basate sulle nostre attuali conoscenze scientifiche, esperienze pratiche e di laboratorio. I consigli tecnici eventualmente forniti, verbalmente o per iscritto, circa le modalità d'uso o d'impiego dei nostri prodotti, non comportano l'assunzione di alcuna nostra garanzia e/o responsabilità in quanto in funzione dell'accuratezza posta nelle varie fasi d'applicazione, sulle quali non abbiamo influenza, si possono verificare delle variazioni. Il cliente non è dispensato dall'onere e responsabilità esclusivi di verificare l'idoneità dei nostri prodotti per l'uso e gli scopi che si prefigge. Il nostro obbligo si limita a garantire la qualità e costanza di qualità del prodotto di cui alle indicazioni stesse.