

Urespray

F-100

Isocyanate

5332

DESCRIPTION

Urespray F-100 is a polyurethane elastomer, which is obtained by means of the reaction of two liquid components (polyol and isocyanate), at an ambient temperature. Blending may be made 'in situ' by conventional polyurethane foam spray equipment

PERFORMANCES

It is an integral coating without joints nor bridges. It provides excellent adhesion onto polyurethane foam. Adherence should be tested, using primers for some difficult substrates. It achieves great resistance to water and chemical agents. Its quick drying allows application onto vertical surfaces. Its spray application allows coating of surfaces with difficult shapes with a resistant, waterproof and perfectly joint integral film.

The elastomer, once cured, due to its being 100% polyurethane sheet, is completely toxic-free, inert, not soluble in water and in the majority of organic solvents.

COMPONENTS

COMPONENT A: **Urespray F-100**
Mixture of polyols, containing catalysers, stabilisers.

COMPONENT B: **Isocyanate 5332**
Modified MDI (biphenyl methane diisocyanate).

USES

The main applications of **Urespray F-100** are in the industrial and building fields, mostly for coating of materials for thermal insulation, such as polyurethane rigid foam. The product should be applied when insulation remains visible, for example: cold rooms, bird farms, tanks, etc., and surfaces subject to frequent cleaning, as well as when aesthetic appearance is required.

EQUIPMENT

The product is designed for application with standard spray equipment having component pressure from **150 to 200 Bar**, which generally allows dosing in a ratio of 1:1, components being heated at **65-75 °C** before their introduction in the static mixer.

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CONDITIONS OF USES

Surfaces to be sprayed should be clean, dry and free from dust and grease. Temperature should range from 10 and 40 °C, relative humidity being below 75%.

Adhesion between fresh-applied elastomer coats is highly resistant, even forming a unique film. Nevertheless, if the application is on an already cured coat, a primer should be applied to assure a good adherence.

Urespray F-100 is specially formulated for an excellent adherence on polyurethane rigid foam. In case of degradation of the insulation due to the passing of time, restore it before applying a new coat of polyurethane foam.

The correct operation consists of applying a very thin first layer; the second application (also thin) may be made as soon as the first one is dry, by using a criss-cross pattern. The first coat will help to detect moisture presence in the substrate, in which case blisters and bubbles will appear. This first coat will also provide insulation power, leading to the achievement of a good foaming operation in the following coats.

Urespray F-100 can be pigmented in several colours, by means of the addition 'in situ' of the corresponding Urespray Paste in component A.

Component A tends to settle due to the passing of time. Therefore, be sure to stir it until full homogenisation, especially if some pigment has been added.

COMPONENTS CHARACTERISTICS

Characteristics	Units	5332	F-100
Specific weight 25°C	g/cm ³	1.11	1.02
Viscosity 25° C	mPa.s	765	1600
Ignition temp..	°C	>175	>170
NCO content	%	15	-

SYSTEM SPECIFICATIONS

Measurement carried out in a test recipient at 22°C and at the mix ratio indicated within the company's standard method (MAN - S03).

Mix Ratio A / B : 100 / 100 in volume.

Characteristics	Units	F-100
Gel time	s	3 - 5
Tack free time	s	6 - 10
Free density	g / l	900 - 1100

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FOAM SPECIFICATIONS

Characteristics		Units	F-100
Average density	UNE 53215	kg/m ³	1000
Tensile strength	DIN 53504	MPa	28
Elongation		%	500
Tear resistance	DIN 53515	N/mm	90
Shore hardness	DIN 53505	ShA	95

STORAGE RECOMEMNDATIONS

All Components are hygroscopic, and should be stored in drums or hermetic deposits. Storage temperature should be between +15°C and +25°C.

Lower temperatures that could cause crystallisation in the isocyanate should be avoided, as well as higher temperatures that may provoke alterations in the polyol.

With a correct storage, component A (polyol) has a pot life of 4 months, for component B (isocyanate) 6 months.

SAFETY RECOMMENDATIONS

With the right handling, the system has not great risks. If there is eye and skin contact, wash well with lots of water. During the system production and handling, the Safety Data Sheets should be observed. A more extensive information of the subject can be found in the Safety Data Sheet of each product.

SUPPLY

The product supply will be in accordance with our sales department.