Product Information MASK Polyurea WP

General Information

MASK Polyurea WP is a broadly used polyurea spray elastomer system. It consists of the two components MASK Polyurea AMINE WP and MASK Polyurea ISO WP. It offers excellent surfaces and good overall physical properties.

The WP series is a pure polyurea formulation designed for water proofing membranes and light traffic areas. It combines advantages of seamless films with very long life cycles and high durability.

Properties	Unit	Typical values	Sales specifications
Chemical and Physical Data of MASK AMINE WP / MASK ISO WP			
Appearance Amine component Isocyanat resin		clear to yellowish liquid yellowish to brownish liquid	
Density at 25°C Amine component Isocyanat resin	g/cm ³ (lb/ft ³) g/cm ³ (lb/ft ³)	1.00 (62.4) 1.12 (69.9)	
Primary amine value / NCO content	mg KOH / g wt%	210 16	min. 202 15.4 – 16.4
Viscosity Amine component Isocyanat resin	mPa⋅s mPa⋅s	< 1500 1000	
Water content of the Amine	wt %	0.05	max. 0.25
Boiling point Amine component Isocyanat resin	°C (°F) °C (°F)	> 200 (> 392) > 200 (> 392)	
reaction time	s	8	
Processing parameters			
Block Temperature	°C (°F)	70 - 80 (158 - 176)	
Hose Temperatures (A and B)	°C (°F)	70 - 80 (158 - 176)	
Constant pressure	bar	120	
Physical Properties of the reaction product / sprayed surface			
cure time, walkable	min	2	
Density at 25°C (cured)	g/cm ³ (lb/ft ³)	1.02 (63.7)	
Elongation ASTM D412	DIN 53455	333	
Tensile strength ASTM D412	DIN 53504	22	
Tear strength ASTM D624C		38	
Shore-A/D ASTM D 2240	DIN EN 53505	94/43	
Abrasion (Taber H 18)	DIN 53516	200 (approx.)	

Application

MASK Polyurea WP offers ease in processing as well as excellent physical properties.

Usual applications are:

- light traffic areas
- roofing, foundations
- water tanks, secondary containments
- sewage systems, pipers

Processing

Surface preparation:

Before spraying the surface should be blast cleaned to achieve a smooth appearance. Also the surfaces should be free from any contaminations such as oil or dust and should be dry.

Processing parameters:

The re-coat window ranges from 20 seconds to a few hours depending on the application. The post cure takes at 20°C 24 hours. The temperature of the sprayed object can be theoretically between 0 to 50°C, with reaction times significantly longer at low temperatures in the range of 0 to 15°C. Observe dew point.

Spraying machine

A high pressure spray proportioning machine for plural heated components such as those manufactured by GlasCraft and Graco should be used for this material.

Neccessary amount

For a sprayed area of 1 m² with 2 mm coating thickness approx. one litre of each components is needed.

Note:

The coverage figure is theoretical – due to wastage factors and the variety and nature of substrates, practical coverage figures may vary.

Coating

Should be applied by specialist applicators approved by MASK Polyurea. Do not dilute MASK Polyurea WP under any circumstances. Use appropriate chemical for flushing of equipment. If material is stored for a period of time thoroughly mix the amine component with drum mixer until a homogenous mixture and color is obtained.

Safety and Handling

MASK Polyurea WP

Classification: MASK Polyurea AMINE WP

Labelling



C, N (Xn): Corrosive, dangerous for the environment, harmful

R-Phrases S-Phrases 21/22-34-48/22-50/53 20-23-26-36/37/39-45-57