

GENERAL

DESCRIPTION:

Karacase C-251 is a two-component, highly reactive flexible pure polyurea spray coating material formed by the reaction of the isocyanate-based prepolymer and the multi-functional amine mixture.

Application Areas

- Roofs
- Terraces
- Industrial surfaces
- Roads
- Parking Lots
- Pipes
- Car bedliners
- Pools

General Properties

- Fast curing
- Seamless coating application
- Application on vertical surfaces
- High mechanical strength
- Chemical resistance
- Corrosion resistance
- Abrasion resistance
- Environmentally friendly (VOC free)

COMPONENTS:

<i>Component</i>	<i>Product Name</i>	<i>Descriptions</i>
Polyamine	Karacase C-251	Polyamine compound
Prepolymer	Karanate CI-05	Polyurethane prepolymer

PHYSICAL AND CHEMICAL

PROPERTIES OF COMPONENTS:

<i>Parameter</i>	<i>Unit</i>	<i>Karacase C-251</i>	<i>Karanate CI-05</i>	<i>Test method</i>
Density (21°C)	g/cm ³	1.00-1.03	1.10-1.12	DIN 51757
Viscosity (25°C)	mPa.s	300-500	500-750	ASTM D 4878
Solid Content	%	100	100	In house test method

COMPONENT RATIOS:

Component	Product Name	Unit	Value
Isocyanate	Karanate CI-05	By weight	110
Prepolymer		By volume	100
Polyamine	Karacase C-251	By weight	100
		By volume	100

REACTION CHARACTERISTICS:

Control Characteristic	Unit	Value	Test method
Gel time	sec	3-5	Internal Karachem Method
Tack Free Time	sec	13-15	Internal Karachem Method

PHYSICAL AND MECHANICAL PROPERTIES OF PRODUCTS:

Parameter	Unit	Value	Test method
Tear resistance	N/mm	30-55	ASTM D 624
Elongation at break	%	500-600	ASTM D 412
Tensile strength at break	N/mm ²	15-21	ASTM D 412
Hardness	Shore A	90-100	DIN 53505

CHEMICAL RESISTANCE

Karacase C-251/Test Media	Result
Water (%100)	+
2,2,4 Trimethylpentane (%99.5)	+
Ethyl acetate(%99.5)	+
Acetone(%99.5)	+
Acetic acid(%5)	-
Citric acid(%1)	-
Hydrochloric acid(%10)	-
Phosphoric acid (%10)	+
Lactic acid (%90)	+
Sulphuric acid (%30)	-
Stearic acid (%50)	+
Hydrogen peroxide (%3)	+

Karacase C-251/Test Media	Result
Ethyl alcohol (%95)	+
Isopropyl alcohol (%96)	+
Petrol	+
Bleach (%3)	+
Sodium carbonate (%20)	+
Sodium chloride (%10)	+
Heptane (%97)	+
Hexane (%98)	+
Fertilizer	+
Diesel fuel	+
H ₂ O/sugar	+
H ₂ O/ acetum 95/5	+

Karacase C-251/Test Media	Result
Ammonium hydroxide (%10)	+
Brake fluid	+
Methanol (%99)	+
Butanone (%99.9)	+
NaOH (%60)	+
Olive oil	+
Propylene carbonate (%99.5)	+
Solid bicarbonate of soda (%100)	+
Sodium triphosphate (%100)	+
Anionic surfactant	+
Toluene(%99.5)	+
Xylene (%99)	+

+ Resistant
 - Not Recommended

In the test carried out according to the ASTM D 543 standard, 3 separate pieces from the sample are cut in the dimensions specified and kept in the specified chemicals according to the demand for 7 days. Samples are gently shaken every 24 hours. Before and after testing, the weight, size, mechanical and physical properties of the samples are observed and recorded to observe the change.

PROCESS
CONDITIONS:

Karacase C-251 (polyamine) and the Karanate CI-05 (prepolymer) should be applied using high pressure and temperature spray equipment in order to ensure homogeneous mixture and application. Prior to the application, surfaces must be free from dust, dirt, oil and similar residues that will prevent the material adhesion.

The application temperature should be between 70-80°C, and the application pressure should be between 120 and 200 bar.

Consumption: For 1 mm thickness polyurea coating 1,1-1,2 kg/m²

HANDLING
AND STORAGE
CONDITIONS:

Storage: Karacase C-251 and Karanate CI-05 is sensitive to moisture and should therefore be stored in sealed packages.

Shelf life: Karacase C-251 Karanate CI-05 can be stored for 12 months in its original sealed packaging at approximately 25°C. Storage at high temperatures shorten the shelf life.

Packaging: Karacase C-251: Available in 200 kg drum

Karanate CI-05: Available in 220 kg drum

NOTICE
REGARDING
SAFETY AND
USAGE:

Material Safety Data Sheet (MSDS) will be provided to you by **KARACHEM CHEMISTRY** sales representative during the product supply. It is advisable to review this form before handling and use and also to check your own handling, safety and process conditions. It is necessary to dispose of the finished product drums according to MSDS. **KARACHEM CHEMISTRY** commits protecting human health and the environment during the production conditions and customer conditions. So **KARACHEM CHEMISTRY** is always ready to help its customers in this regard. Please contact to your **KARACHEM CHEMISTRY** representative when you need help.

CONTACT
INFORMATION:

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