

Uramine® FC

Epoxy Curing Agent

Description

Uramine-FC – Nonisocyanate Hydroxyalkylurethane Modified curing agent for Epoxy-amine systems. It's designed for use as a Fast curing agent for liquid compounds in most indoor applications - abrasive, impact and chemical resistant floorings, paints and other coatings.

Advantages

- Accelerated curing and fast properties development
- Absence of solvents.
- Good moisture and chemical resistance;
- Excellent adhesion properties;
- High impact and tension strength;
- Excellent hardness;
- High gloss and color retention.
- Increased abrasion resistance;
- Low viscosity;
- Hygienic and simple cleaning.

Applications

- Hardener for application of indoor epoxy –amine systems;
- Accelerator for other curing agents;
- Civil engineering;
- Increases decorative coating appearance.

Storage:

Keep in a well-ventilated place in tightly sealed containers.

Keep at the temperature 59-77°F (15-25°C).

Protect from frost.

The viscosity increases significantly at low temperature..

Keep away from heat, direct sunlight and acids.

Storage life at least 12 month from the date of manufacture in the original sealed container at ambient temperature.

Store away from acids, excessive heat and humidity in closed containers.

Handling Precautions

Refer to the material Safety Data Sheet for Uramine 5851.

TECHNICAL DATA SHEET

PROPERTIES	UNIT	STANDARD	VALUE
General			
Type of the product	Modified Nonisocyanate Curing Agent		
Use	Hardener that improves physical properties of hybrid epoxy-urethane coatings - flooring, paints, varnish, etc.		
Typical Physical Properties			
Physical Form	Liquid		
Color	Colorless to yellowish		
Density at 77°F (25°C)	lb/gal (g/cm ³)		(8 - 8.4) (1.0- 1.05)
Viscosity at: +77 (+25) °F (°C) (Brookfield RVDV II, Spindle 29, 100 rpm)	cP (mPa's)	ASTM D2196	80-100 cP
Odor			Amine
Total Amine Value	mg KOH/g		500-510
Equivalent Wt /(H)			55-58
Application temperature	°F (°C)		+ 59-77 (+ 15-25)
Flash Point (closed cup)	°F (°C)		> 230 °F (110° C)
Boiling point:	°F (°C)		> 401.5°F (205.3°C)
Melting point:	°F (°C)		< 5°F (-15°C)
Solubility in Water			Miscible
Typical Handling Properties *			
Gel Time (150g mix at 77°F (25°C))	min		20
Thin Film Set Time at 77°F (25°C)	min		90
Tensile strength at break	psi (MPa)	ASTM D638	7,000-9,000 (49-63)
Elongation at break	%	ASTM D638	4-6
Hardness (Shore D)		ASTM D2240	75-80
Abrasion resistance (TABER, wheel C17 1000g), loss of mass	mg/1000 cycles	ASTM D4060	25-30
*Uramine -FC curing agent formulated with light stable standard Epoxy Resin DGEBA (EEW=190)			
Weight gain at immersion 24h at 77°F (25°C) - in water - in Sulfuric acid -10% H ₂ SO ₄	%	ASTM D570	0.1-0.5 0.5-1
Motor oil			No effect
Brake fluid			No effect
Vegetable oil			No effect