RESINS & PLASTICS LTD.

R-5201

TECHNICAL DATA SHEET

R-5201 Liquid Cycloaliphatic amine adduct curing agent.

Description:

R-5201 is liquid cycloaliphatic amine adduct curing agent, it is used in combination with unmodified/modified liquid epoxy resin for self-levelling top coat applications. It offers medium pot life, good wetting ability and high gloss coatings.

Application and Key Properties:

Suitable for formulating self-levelling top coats with various choice of resins.

Low color and color stability, High gloss in coatings, Low viscosity and good wettability.

Product specification:

R-5201

Sr. No	Specification	Units	Reference standard	Specification
1	Appearance	Visual	WI/QC/FG/A/2	Clear
2	Colour	Gardener Scale	ASTM D1544	1
3	Viscosity @25°C on B/F Spindle- 27, RPM- 100	cPs	ASTM D 2196	350 - 400
4	Amine Value	mg KOH/g	WI/QC/FG/B/25	250 - 300
5	Odour	-	NA	Amine
7	Density	g/cc	ASTM D-1475	1.02 - 1.04
8	AHEW	Eq/H+	NA	109

Product Performance Data:

Basic Properties:

Sr. No	Specification	Units	Typical value
1	Mix ratio with Epoxy EEW-190	-	100:60
2	Pot Life @25°C	min	30 – 40
3	Peak Exotherm	°C	92
4	Time To Peak Exotherm	min	40
5	Tack free dry of thin film	hrs	2 – 3
6	Through dry of thin film	hrs	5 – 6

Mechanical and Thermal properties:

Sr. No	Specification	Units	Reference standard	Result
1	Compressive strength	MPa	ASTM C 190-2023	77.6
2	flexural strength	MPa	ASTM C 348-2021	83.8
3	Tensile Strength	MPa	ASTM C 307-2023	60.9
4	Glass transition temperature	°C	DSC	71.9°C

***The neat cast were prepared as per respective standard and cured at Room Temperature for 7 days and then subjected to testing.**

Chemical Resistance properties:

Properties	units	3 Days	7 Days	28 Days
Water	%	0.0208	0.0341	0.0473
Methyl Ethyl Ketone	%	1.0653	2.1022	Destroyed
Xylene	%	0.0212	0.0278	0.0383
DI Water	%	0.0127	0.0176	0.0397
10% Acetic Acid	%	0.1131	0.1252	0.3376
70% H_2SO_4	%	0.026	0.0515	0.1115
50% NaOH	%	0.0129	0.0171	0.0328

***1cc of cast was prepared, cured for 7 days at Room Temperature , immersed in respective chemical and % weight change was recorded.**

Storage Conditions:

Components should be stored away from light & heat. Partly emptied containers should be tightly closed immediately after use to avoid exposure to air and light. For information on waste disposal and hazardous products of decomposition in the event of a fire, refer to the material safety data sheets (MSDS) for these particular products. The shelf life is 12 months for all components.

Note: - The information given on this leaflet is based on our laboratory experimental work and is correct to the best of our knowledge. We are not responsible for any loss, injury or damage resulting from the use of this information.

Indications regarding dilution & other processing features are strictly meant as a guide for the paint