PRODUCT TECHNICAL DATA SHEET

ES-1095

Casting Type Polyester

DESCRIPTION AND BASIC PROPERTIES

ES-1095 ISO/NPG Based and MMAK modified Chemically Resistant Polyester is a high reactive resin that is used for casting applications. This resin has high mechanical strength as well as being used in the production of materials requiring high temperature and chemical resistance. Furthermore, it can be safely used in the production of cuvettes, sinks, kitchen counters, table edges-legs, buttons, ornaments etc.

APPLICATION METHODS	CHEMICAL STRUCTURE
Hand lay-up Casting	**Acid:** ISO/NPG **Acceleration:** No **Reactivity:** High **Modification:** MMAK

PROPERTIES OF LIQUID FORM

	UNIT	VALUE	METHOD
Appearance		Clear	
Viscosity[1]	cp	650±100	ISO 2555
Monomer Content	%	36 ± 3	ISO 3251
Density	g/cm^3	1.10±0.02	ISO 1675
Acid Number	mg KOH/g	15 ± 3	ISO 2114
Gel Time[2]	min	10 ± 2	ISO 2535
Peak Exotherm[2]	°C	190 ± 10	ISO 584
Shelf Life	month	6	-

[1]Brookfield DV II, 25°C, 3 spd, 10 rpm
[2]25°C 0.1 mL Cobalt Octoate (6 % con.) and 1,5 mL MEK-P (Butanox M50) to 100g sample

MECHANICAL PROPERTIES OF CURED RESIN

	UNIT	VALUE[1]	METHOD
Tensile Strength	MPa	65 ± 5	ASTM D638
Tensile E-Modulus	GPa	3.9 ± 0.1	ASTM D638
Elongation At Break	%	4,7 ± 0.3	ASTM D638
Flexural Strength	MPa	140 ± 10	ASTM D790
Flexural E-Modulus	GPa	4,0 ± 0.2	ASTM D790
Heat Deflection Temperature (HDT)[2]	°C	90 ± 5	ISO 75 A
Impact Strenght	KJ/m^2	11 ± 5	ASTM D2583

[1]For fully cured resin, curing Schedule- 24 hrs at 20°C, 4 hrs at 90°C
[2]Curing Schedule- 24 hrs at 20°C, 4 hrs at 90°C, 3 hrs at 120°C

STORAGE CONDITIONS

It should be stored in a dry, clean and cool place (15-25 °C) in closed packages. The shelf life of the product is valid for this temperature range and it should not be forgotten that it will shorten at high temperatures. Products with the same charge number and date must be stored together.

Another factor that affects the life of unsaturated polyester resins containing styrene is sunlight. Styrene must be polymerized in the sunlight and products that are considered to shorten the life of the product should be avoided from direct sunlight contact.

MORE INFORMATION

ESKİM KİMYA
Organize Sanayi Bölgesi 6. Cad. No:2 26110 ESKİŞEHİR
TEL:0(222) 236 01 90 (PBX)
FAKS: 0(222) 236 01 87

http://www.eskim.com.tr