

PRODUCT CODE : Misc. / 10.16

Synpol PE-4554

TYPE : Solvented, pre-condensed epoxy resin - acid polyester blend.

SPECIFICATIONS :

1) Appearance:	Slightly cloudy yellow brown liquid.
2) % Solids @ 120 ⁰ C for 2 hrs	58 - 62
3) Solvent	MEK / Toluene / Xylene (approx. 4 : 6 : 3)
4) Viscosity at 25 ⁰ C, poise	1 - 3.5
5) Epoxy content, mol / kg	0.25 – 0.32
6) Acid value, mg KOH / gm of resin solids	25 - 30
7) Acid content, mol / kg	0.25 - 0.32
8) Specific gravity 25 ⁰ C	1.00 - 1.05

Reactivity of Prepreg, dried 15 min/150⁰ C.

	Synpol PE-4554 Unaccelerated	Synpol PE-4554 + 1% HZ 15	Synpol PE-4554 + 3% HZ 15
Minimum acceptable cure time	2 hr / 150 ⁰ C. Or 1 hr / 180 ⁰ C.	1 hr / 150 ⁰ C. Or ½ hr / 180 ⁰ C.	½ hr / 150 ⁰ C.
Cure time for maximum properties.	8 hr / 150 ⁰ C. Or 4 hr / 180 ⁰ C.	4 hr / 150 ⁰ C. Or 2 hr / 180 ⁰ C.	2 hr / 150 ⁰ C. Or 1 hr / 180 ⁰ C.

Processing instructions:

Synpol PE-4554 is used for the manufacture of thermosetting insulating tapes showing good flexibility before and after cure and Class F temperature performance. Suitable substrates include mica paper and unidirectionally reinforced polyester web.

For controlling the reactivity during advancement and for the subsequent cure, Synpol PE-4554 is normally modified with a basic accelerator. As indicated above, Hardener HZ-15 can be used, this shows superior latency characteristics compared with simple tertiary amine or imidazole catalysts.

As prepreg tack-inhibitors, fillers such as talc, red iron oxide or magnesium oxide may be employed.

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MATERIAL SAFETY DATA :

Product name	Synpol PE-4554
Flash point ⁰ C. (Abel closed cup)	27
Flammability	Moderate fire risk due to presence of Toluene and Xylene.
Toxicity	Mild toxic.
Handling	Keep away from sources of ignition, provide all electric connections of flame-proof design. Wear safety glasses, rubber gloves and protective clothings.
Emergency treatment and measures	
1 Hygienic precautions	Adequate ventilations.
2 Hygienic treatments (First Aid)	Flush eyes thoroughly with water. Apply ophthalmic cortisone for conjunctivitis and keratities. Wash out contaminated skin with soap and water. Gastric lavage (stomach wash), if swallowed, followed by saline catharsis.
3 Fire precautions (in case of outbreaks)	Use dry chemical or carbon dioxide. Water spray may help to keep containers cool, to dilute leaked resins and to diffuse vapours.
Spills and leakage	Absorb liquid materials in sand and collect solid material and burn under hood in incinerator.
Disposal and waste treatment	Spray into furnace under controlled conditions.

STORAGE :

Synpol PE-4554 should be stored in cool place under shade. At 20⁰ C, in closed containers, Synpol PE-4554 has usable life of minimum 6 months. This shelf life is substantially reduced at elevated temperatures and refrigerated storage is recommended in hot climates.

PACKING :

25 kgs. M.S. drums, 50 kgs. Plastic carboys and 200 kgs. M.S. barrels.

DISCLAIMER :

Information in this literature is to the best of our knowledge true and accurate. However, since conditions under which our products may be used are beyond our control, recommendations are made without warranty or guarantee.

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