

PRODUCT CODE: HARDENER / 04.08 & 04.10

## Hardener 340 & Hardener 350

TYPE : Modified aromatic polyamine hardener.

DESCRIPTION : Solvent free formulated aromatic polyamine epoxy adduct. Hardener 340 is slow curing, while Hardener 350 is catalysed fast curing hardener.

SPECIFICATIONS :	Hardener 340	Hardener 350
1) Appearance	← Clear dark reddish brown viscous liquid. →	
2) Specific gravity @ 25 <sup>o</sup> C.	1.05 - 1.15	1.0 - 1.2
3) Viscosity @ 25 <sup>o</sup> C., poises	40 - 60	150 - 210
4) Colour hardener	18	18
5) Mixing ratio with 100 parts of Synpol 200	60	60
6) Pot life @ 25 <sup>o</sup> C for 100 gm mass	> 20 Hrs,	20 - 40 mts.
7) Gel time @ 25 <sup>o</sup> C for 160 gm mass, hrs.	16 - 24	3 - 5

COMPATIBILITY : Hardener 340 and Hardener 350 are compatible with all types of liquid epoxy resins, reactive diluents, plastisizers and polyamide hardener such as Synpol 140 and Synpol 160.

APPLICATIONS : Hardener 340 and Hardener 350 is very useful for formulating coatings for tank linings, coatings and linings for concrete and metal pipes, chemical resistant flooring, concrete structural finishes, marine coatings and under water coatings. Hardener 340 and Hardener 350 based coatings gives excellent resistance to organic acids and bases, good mechanical properties, outstanding resistance to abrasion. It cures completely even under water, at low temperature without blushing or exudation. Proper combination of Hardener 340 & Hardener 350 should be selected so as to get desired pot life and cure rate.

### SUGGESTIVE FORMULATIONS :

*Chemical resisting coatings for storage tanks and pipes of concrete and metals, and structures in corrosive industries.*

Type of formulations	Clear coat	Primer coat	Finished coat	Coal tar modified black coat
Part I : Base				
Synpol 200	62.5	55.0	37.5	38.5
Titanium dioxide anatase	-	7.5	5.0	-
Aerosil 200	-	1.5	1.5	-
Silica flour	-	-	31.0	-
Coal tar	-	-	-	11.5
Part II : Hardener				
Hardener 340	28.0	22.0	15.0	19.0
Hardener 350	9.5	11.0	7.5	4.0
Dibutyl phthalate	-	3.0	2.5	-
Coal tar	-	-	-	27.0
Total	100.0	100.0	100.0	100.0
Mixing ratio	62.5 : 37.5	64 : 36	75 : 25	50 - 50
Pot life @ 25 <sup>o</sup> C., hrs.	1 - 2	2 - 3	2 - 3	3 - 4

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## MATERIAL SAFETY DATA :

Product name	Hardener 340 and Hardener 350
Flash point ° C. (Abel closed cup)	120
Flammability	Combustible.
Toxicity	Moderate toxic. Avoid contact with skin.
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 :

Hardener 340 and Hardener 350 should be stored in cool place under shade. The properties are so adjusted to have storage stability of minimum 6 months.

### 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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