



## Technical Data Sheet

### P - EPOX - 2800 X 65

High Performance Epoxy Resin: **P - EPOX - 2800 x 65** is an unique “Epoxy Ether” resin developed by reacting alkyl phenol with bis- phenol epoxy resin. It is further modified to enhance the performance, to protect the substrate, in adverse climatic conditions.

#### Applications

- One pack air drying epoxy coatings
- Modification of standard two pack epoxy coatings
- Two pack epoxy- PU hybrid coatings
- One pack stoving epoxy with blocked isocyanates
- One pack stoving epoxy coating with MF / UF / phenolic resins

#### Physical Properties

Sr. No.	Property	Unit	Specification
i)	Appearance	Visual	Light Yellow Viscous Liquid
ii)	Colour	Gardner	12 Max
iii)	Viscosity @ 25° C	cPs	10000 - 30000
iv)	Density @ 25° C	gm / cm <sup>3</sup>	0.97 - 1.00
v)	Flash Point (Closed Cup )	°C / °F	29 / 110
vi)	N.V.M [ 1 hr @120° C ]	%	65 ± 2
vii)	Hydroxyl Equivalent Weight	g / eq.	720

#### Drier Combination

- i) Co – 0.050 %
- ii) Ca – 0.150 %
- iii) Zr – 0.05 %
- iv) Mn – 0.035 %

i)	Viscosity in 40 % xylene	40 - 60 sec
ii)	Viscosity with Drier in 40 % xylene	45 - 65 sec
iii)	Viscosity Overnight with Drier in 40 % xylene	50 - 70 sec

#### Drying Time ( at 30° C )

- i) Set : 5 – 10 mins
- ii) T.F. : 1.5 – 2 hrs

#### Advantages

##### I) One Pack Systems

- a. User friendly protective coatings for mechanically cleaned surfaces can be developed
- b. Fast drying one pack epoxy systems against chlorinated rubber / vinylflex can be developed which offer excellent corrosion, acid & alkali resistance



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### II) Modification of Standard Epoxy Two Pack Coatings (Modification up to 30% & Advantages against std. Two Pack Epoxy Systems)

- Cost reduction
- Gives good acid, alkali & corrosion resistance
- Improves surface wetting properties for maintenance primers/coatings
- Higher workable pot life
- Increases recoating interval incase of primers & mid coats.
- Better pigment dispersion & wetting during production.

### III) Two Pack Epoxy - PU Hybrid Coating

- Low temperature curing is better than epoxy / phenalkamine systems
- Very good flexibility
- Very good solvent & chemical resistance

### Starting Formulation for PEPOX-2800 X 65

#### A) Protective Coatings ( Single Pack )

Sr.No	Raw Material	Qty. (kg)
i)	Pigment & Extenders	40.00
ii)	Anticorrosive Pigment	08.00
iii)	Anti Tera (U)	00.40
iv)	P Epox -2800 x 65	32.00
v)	BYK - 410	00.60
vi)	Thinner	17.60
vii)	Drier	01.40
Total		100.00

### Paint Properties

Sr. No.	Properties	Specification
i)	V.O.C.	434 g / lit
ii)	P.V.C. in Dry Film	30 %
iii)	Pigment / Resin Ratio by Volume	1 : 1.75
iv)	Solid by Weight	70.00 %
v)	Mix Viscosity	100 $\pm$ 20 sec at 30° C



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### B) Two Pack Epoxy Primer with Part Replacement by PEPOX-2800 X 65

Name of Raw Material	Quantity (Kg)
<b>Base</b>	
P EPOX 2800 X 65	11.07
Araldite 6071 X 75%	16.78
Tio 2 Rutile	6.00
Silica Micron	12.30
Statite Micron	12.30
Zinc Phosphate	6.00
Baraties	8.00
Anti Terra 'U'	0.30
Ben Tone P 27 Jelly	6.00
Cellosolve	2.55
Butanol	1.40
<b>Hardener</b>	
PPA- 7125	4.20
Xylene	13.10
<b>Total</b>	<b>100.00</b>

P.B.BY Volume	1:1.60
N.V.M. %	69.20 %
Viscosity	Thixo Tropic
SP. Gravity	1.38
Drying	
Surface Dry	30 Min
Hard Dry	24 Hrs
S.V.R.%	50
Mixing Ratio Base - C.A.-	3 Part by Volume 1 Part by Volume

### C) Two Pack Epoxy - PU Hybrid Top Coat

Name of Raw Material	Quantity (Kg)
<b>Base</b>	
Tio 2 Rutile	4.00
Carbon Black HAF	0.05
Zinc Phosphate	6.00
Baraties 500 Mesh	20.00
Talk 500 Mesh	20.00
Disper BYK -110	0.40
PEPOX - 2800 X 65	22.40
O-XYLENE	15.25
Buytle Acetate	3.50
BYK 410	0.40
<b>Hardener</b>	
Desmodure L- 75	7.00



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Butyl Acetate	1.00
<b>Total</b>	<b>100.00</b>

P.B.BY Volume	1 : 1.77
N.V.M. %	69.86 %
Viscosity	Thixo Tropic
SP. Gravity	1.48
Drying Time Surface Dry Hard Dry	30 Min 24 Hrs
S.V.R.%	47
Mixing Ratio Base - C.A. -	9 Part by Volume 1 Part by Volume

### Curing Properties

Sr. No.	Properties	Specification
i)	Surface Dry	10 - 20 min at 30° C
ii)	Tack Free	2 hrs at 30° C

### Handling & Storage

Handling: Avoid use of electric band heater or application of direct flame to container. It can cause explosion & fire.

Storage: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

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Paladin Paints & Chemicals Pvt. Ltd.

Unit No-204, Monarch Chambers, Marol Maroshi Road, Marol Naka, Andheri (E), Mumbai 400 059, Maharashtra, India.

**Phone :** (022) 29202587 / 29206258 . **Fax :** (022) 29254386 . **Email :** vanaprabha@vsnl.com