

Guide Formulations

2K Polyaspartics Topcoat - White

Ref: Inz 2-PolyAspartics White - 021

Part A	Material	Supplier	Amount (g)
Polyaspartics Resin	Desmophen NH 1520	Bayer	17.10
Polyaspartics Resin	Desmophen NH 1420	Bayer	11.40
Wetting & Dispersing Agent	Disperbyk 2155	BYK	1.50
Fumed Silica	Cabosil TS 720	Cabot	1
Pigment	TiO2	Kronos	13
Filler	Portaryte B4 (Airwhite AW4C)	Viaton	20
Molecular Sieve	Sylosiv A4	Grace	2.50
Moisture Scavenger	Incozol 2 (10% Replacement of Polyaspartics Resin)	Incorez	3
Flow & Levelling	Dynoadd F-1	Dynea	0.50
Deaerator	BYK 1794	BYK	0.50
UV Absorber	Tinuvin 1130	Ciba	0.25
UV Stabiliser	Tinuvin 292	Ciba	0.25
Solvent	Butyl Acetate	Local	4.0
			75

Part B	Material	Supplier	Parts by Weight
Polyisocyanate	Desmodur N 3900	Bayer	25
Total			100

Manufacturing Instructions – Part A

- All the raw materials used in this formulation are moisture sensitive, so all the manufacturing must be performed under an inert atmosphere i.e. Nitrogen/Vacuum.

NOTE: All the pigments/Fillers needs to be dried at 80°C overnight before using.

- To a clean dry enclosed vessel add Desmophen NH 1520 and Desmophen 1420
- Add Disperbyk 2155 and mix for 2 mins
- Add Cabosil TS 720, dried Tioxide TR92, Portaryte B4 and Sylosiv A4 (dried) slowly into the resin mix under slow stirring.

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Manufacturing Instructions – Continued

- High speed disperse (HSD) the mixture to achieve the recommended grind.
- Once the required grind is achieved add Incozol 2 into the system
- Premix Butyl Acetate, Dynoadd F-1, BYK-1794, Tinuvin 1130 and Tinuvin 292 and add the mixture to the resin mix with pigments
- Finally stir it for around 5 mins until homogenous.

NOTE: ALL THE ABOVE COMPONENTS SHOULD BE STIRRED UNDER NITROGEN BLANKET

- Finally mix PART A and PART B together until homogenous, the mixture then is ready for use.

Properties

1) Physical Properties

Pot Life (mins)	120
Mixed Viscosity	2700 cP
% Solids	94.90
VOC (g/L)	74
Mixed S.G (g/lit)	1.45

2) Dry Film Properties

All the below properties are measured after 7 day of cure including the initial baking.

Persoz Hardness (secs)	260
Gloss	
20°	85.0
60°	93.0
85°	105.0

Application Properties

This formulation can be applied by Brush, Roller and Spray application (Airless or Air Assisted).