Solvay Specialty Polymers Hylar® 5000 HG Polyvinylidene Fluoride (PVDF) (Unverified Data**)

Category : Polymer , Thermoplastic , Fluoropolymer , PVDF , Polyvinylidinefluoride (PVDF), Molded/Extruded

Material Notes:

Hylar® 5000 HG is a crystalline high molecular weight powder form of polyvinylidene fluoride specifically designed for solvent-based coatings to provide improved gloss. It forms mechanically strong and tough films that have a broad useful temperature range. These films are highly resistant to most environmental conditions including gamma radiation and are essentially transparent to ultraviolet radiation. The weathering characteristics of Hylar® 5000 HG coatings lead to excellent performance for the long term. Hylar 5000 is available only via a licensing program that specifies the composition of Hylar® 5000 HG coatings. A properly formulated finish contains sufficient pigment to make the film totally opaque to ultraviolet radiation at the nominal one mil (0.001 inch) film thickness suggested. Safety Hylar® 5000 HG is stable at temperatures up to 600°F (316°C). When it is subjected to temperatures above 600°F (316°C) for extended periods of time, hydrogen fluoride (HF) begins to evolve, and at temperatures above 700°F (371°C) HF evolution becomes rapid. Hylar® 5000 HG exhibits excellent flame resistance; however, in case of fire, HF and traces of potentially toxic fluorocarbons can be formed. HF is corrosive, causes burns on contact, and has an American Conference Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV-TWA) of 3 ppm (2.5 mg/m³) (1984). Thermal decomposition of Hylar® 5000 HG to HF can also occur in a bake oven in the event that temperatures are not controlled properly. In the event of fire, use NIOSH approved self-contained breathing apparatus and skin protection to protect against volatile decomposition products. Hylar® 5000 HG can be disposed of in an approved land fill, but should not be incinerated unless permitted by applicable law and provision is made for absorption of HF.Information provided by Solvay Specialty Polymers.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Hylar-5000-HG-Polyvinylidene-Fluoride-PVDF-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.75 - 1.76 g/cc	1.75 - 1.76 g/cc	ASTM D792
Moisture Absorption at Equilibrium	<= 0.50 %	<= 0.50 %	Karl Fisher
Water Absorption at Saturation	0.040 %	0.040 %	ASTM D570
Viscosity	1.80e+6 - 2.10e+6 cP @Shear Rate 100 1/s, Temperature 232 °C	1.80e+6 - 2.10e+6 cP @Shear Rate 100 1/s, Temperature 450 °F	Melt; ASTM D3835

Thermal Properties	Metric	English	Comments
Melting Point	164 - 167 °C	327 - 333 °F	ASTM D3418
Decomposition Temperature	382 - 393 °C	720 - 739 °F	1% Wt. Loss in Air; TGA

Optical Properties	Metric	English	Comments
Gloss	>= 40 %	>= 40 %	60°; ASTM D523
UV Transmittance	90 %	90 %	transparent; thickness not quantified

Descriptive Properties	Value	Comments
Appearance	White	
Availability	Europe	
	North America	
Features	Clean/High Purity	
	Crystalline	
	Good Strength	
	Good Toughness	
	Good UV Resistance	
	Good Weather Resistance	
	High Gloss	
	High Molecular Weight	
	Low to No Odor	
	Radiation (Gamma) Resistant	
Forms	Powder	
Generic	PVDF	
Hegman Grind (B)	5.50	ASTM D1210
Processing Method	Coating	
Purity	> 99.5%	polyvinylidene fluoride
Uses	Coating Applications	
	Film	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China