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Data Sheet 20
Optiguard Anti-Fog

Optiguard Anti-Fog

Hi performance UV Curable Anti-Fog coating

PRODUCT DESCRIPTION

Optiguard Anti-Fog is a clear, 100% solids liquid that will cure when exposed to radiant ultraviolet processing systems. ***Optiguard Anti-Fog*** is a primerless, non-marring coating which eliminates fogging on polycarbonate and other plastic substrates.

KEY PERFORMANCE PROPERTIES

Excellent Anti-Fog
Mar Resistant
UV curing type

TYPICAL APPLICATIONS

Optiguard Anti-Fog is designed to provide an extremely effective, non-fogging surface polycarbonate and other plastics. It exhibits superior, non-fogging properties under extreme environmental use. ***Optiguard Anti-Fog*** coating solution may be diluted with alcohols to desired consistency.

TYPICAL LIQUID PROPERTIES

Properties		***Optiguard Anti-Fog***
Main Component		Acrylate
Appearance		Clear to amber liquid
Viscosity@25ºC(cP)	ASTM D 4212	92-94
Density@25ºC	ASTM D 1475	1.12
Solids Level (%)	ASTM D 2364	98-100%
PH		slightly acidic

* For safety details, please refer to the MSDS provided.

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APPLICATION METHOD

Coating Methods :	spin, dip, flow-coating, spray
Useable solvents :	DNA, methanol, isobutanol, n-butanol
Working temperature condition :	18ºC ~ 25ºC
Dipping bath temperature :	20ºC ~ 26ºC
Working Relative humidity condition :	below 50%
Useable filter / filter pore size :	polyolefin, PTFE / 0.5 ~ 1.0

SUBSTRATE PREPARATION

Cleaning process		Conditions
Cleaning	Isobutanol / LD Naphtha* (90:10) *heptane or LD Naphtha	
Destaticize	De-staticized air	
Cleaning	Small molded articles and lenses: submersion bath. Large, flat panels: manually wiped with cleaning solvent.	25ºC 2 ~ 5 min.
Drying	Infra-Red oven	30 ~ 40ºC 5 ~ 10 min.
Destaticize	De-staticized air	

CURE CONDITIONS

Thermal curing process	Conditions
UV Cure 400 Watts/inch @ 30 feet/minute	25ºC 1 pass

CURED FILM PROPERTIES

Property	Method	Values
Luminous Transmittance	ASTMD E1348	< 98.5%
Adhesion	ASTM D3359-B	100/100
Pencil Hardness	ASTM D 3363	2H

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