

Dow Corning[®] 30-424 Additive

FEATURES & BENEFITS

- White silicone fine powder
- Contain methacryloxy group
- Light diffusion effect
 - Similar diffusion effect compared to TREFIL E-606 at lower loading
 - Hot spot suppression at lower loading compared to silicone benchmark
 - Homogeneous dispersion throughout the complete light spectrum

COMPOSITION

- Silicone Elastomer Powder

APPLICATIONS

- Additive for polystyrene
 - Light diffuser for backlight module of LCD displayer
- Additive for polycarbonate
 - Light diffuser for plastic cover of LED Lighting

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Property	Unit	Result
Appearance		White powder
Average particle size	µm	2
Particle size distribution	µm	1-3
Bulk density	g/ml	0.2

DESCRIPTION

Dow Corning[®] 30-424 additive is a cross-linked methacryloxy functional silicone elastomer powder.

Methacryloxy group could provide good dispersion in plastic matrix.

Dow Corning 30-424 additive can provide good optical performance balance of transmittance, haze as well as diffusion effect. This powder could be used for light diffusion effect for LED lighting as well as for diffusion plate in backlight module of LCD displayer application.

HOW TO USE

When used as polycarbonate additive *Dow Corning* 30-424 additive can be applied into twin screw extruder compounding process by pre-blending with the resin pellets or resin powder. Making master batch firstly for *Dow Corning* 30-424 Powder and then extruding it with resin could be another processing route with better dispersion effect.

Generally the loading of this powder is approximately 0.1~1% to provide light diffusing effect in final polycarbonate matrix. The optimum level of loading should be determined by actual testing and application conditions.

LIGHT DIFFUSING PERFORMANCES AT 0.5% LOADING ON 1.5MM THICKNESS PLATE

Property	Unit	Result
Total transmittance	%	59
Haze value	%	90
Diffusion factor at 600nm (D50)		55

TYPICAL MASTERBATCH FORMULATION (MB-5-E-POWDER)

Product	Dosage (in wt%)
Lexan141R	94.3
30-424 additive	5
Irgafos 168	0.5
Irganox 1010	0.2

TYPICAL FORMULATION USING MASTERBATCH

Product	Dosage (in wt%)
Lexan141R	89.3
MB-5-E-powder	10
Irgafos 168	0.5
Irganox 1010	0.2

**HANDLING
PRECAUTIONS
PRODUCT SAFETY
INFORMATION REQUIRED FOR
SAFE USE IS NOT INCLUDED IN
THIS DOCUMENT. BEFORE
HANDLING, READ PRODUCT
AND MATERIAL SAFETY DATA
SHEETS AND CONTAINER
LABELS FOR SAFE USE,
PHYSICAL AND HEALTH
HAZARD INFORMATION. THE
MATERIAL SAFETY DATA
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APPLICATION ENGINEER, OR
DISTRIBUTOR, OR BY CALLING
DOW CORNING CUSTOMER
SERVICE.**

**USABLE LIFE AND
STORAGE**

When stored at or below 25°C in the original unopened containers, this product has a usable life of 27 months from the date of production.

**PACKAGING
INFORMATION**

This product is available in 10kg/bag

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

**HEALTH AND
ENVIRONMENTAL
INFORMATION**

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our Web site, dowcorning.com or consult your local Dow Corning representative.

**LIMITED WARRANTY
INFORMATION – PLEASE
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