

# Technical Bulletin

## ZQ™ PIGMENTS

DayGlo® ZQ™ Pigments are an improved version of DayGlo Z™ Pigments. They offer lower mold plate-out, increased plastic compatibility, require lower processing temperatures, and have larger particle size to reduce dusting.

### Available Colors:

ZQ-11	Aurora Pink®	ZQ-16	Arc Yellow™
ZQ-12	Neon Red™	ZQ-17	Saturn Yellow®
ZQ-13	Rocket Red™	ZQ-18	Signal Green™
ZQ-14	Fire Orange™	ZQ-19	Horizon Blue™
ZQ-15	Blaze Orange™	ZQ-21	Corona Magenta™

### Chemical Nature & Dispersion Properties:

ZQ Pigments are a solid solution of fluorescent dyes in a thermoplastic modified polyamide resin. To ensure complete color development when incorporating ZQ Pigments into plastic resins, it is essential the minimum processing temperature of 350°F (175°C) is reached in order to completely melt and evenly distribute the pigment throughout the plastic.

### Typical Physical Properties:

Minimum Processing Temperature	350°F (175°C)
Heat Stability	575°F (300°C)
Melting Point	248°F-275°F (120°C-135°C)
Melting Point (ZQ-18, ZQ-19)	280°F-310°F (138°C-155°C)
Specific Gravity	1.20
Bulk Density	28-31 lbs./ft³
Oil Absorption	53g/100g pigment
Average Particle Size	20-60 Microns

### Heat Stability:

ZQ Pigments offer excellent heat stability in injection molded plastics when compared to other thermoplastic fluorescent pigments commercially available. The maximum recommended processing temperature is 575°F.

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## Additives:

Certain metal ions and nucleated polymers are known to cause color changes and loss of brightness with fluorescent colorants. Studies have shown that plastic processing additives containing zinc, magnesium, calcium and iron will cause deleterious color effects when used in a plastic resin system containing ZQ Pigment.

If a metal containing additive must be used, it should be thoroughly tested to ensure the color stability of the ZQ Pigment. Also, refer to Technical Bulletin "Effects of Metal Ions on Fluorescent Colorants in Plastics".

## Applications:

Polyethylene	+	PA (Nylon)	+/-
Polypropylene	+	Polycarbonate	+/-
Polystyrene	+/-	PMMA (Polyacrylic)	+/-
ABS	+/-	Rigid PVC	+/-
Ionomer	+/-	Urethane	+/-

+ Recommended

+/- Recommended, but should be tested in individual resins

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