

# Technical Data Sheet

## ZQ Pigments

### General Description

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 reducedusting.

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 to completely melt and evenly distribute the pigment throughout the plastic

### Available Colors

Code	Color
ZQ-11	Aurora Pink
ZQ-12	Neon Red
ZQ-13	Rocket Red
ZQ-14	Fire Orange
ZQ-15	Blaze Orange
ZQ-16	Arc Yellow
ZQ-17	Saturn Yellow
ZQ-18	Signal Green
ZQ-19	Horizon Blue
ZQ-21	Corona Magenta
ZQ-2168	Strong Magenta

### Typical Physical Properties

Specific Gravity	1.20
Average Particle Size	20-60 Microns
Oil Absorption	53g/100g pigment
Bulk Density	28-31 lbs./ft <sup>3</sup>
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)
General Solubility	Insoluble in water, hydrocarbons and many common solvents

### 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.

### 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

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the color stability of the ZQ Pigment. Also, refer to Technical Bulletin "Effects of Metal Ions on Fluorescent Colorants in Plastics".

### Application Recommendations

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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