

Technical Data Sheet

ZQ™ Pigments

General description

DayGlo® ZQ™ pigments are a solid solution of fluorescent dyes in a thermoplastic modified polyamide resin.

They offer lower mold plate-out, increased plastic compatibility, require lower processing temperatures, and have larger particle size to reduce dusting.

To ensure complete color development when incorporating ZQ pigments into plastic resins, the minimum processing temperature of 350°F (175°C) must be reached to completely melt and evenly distribute the pigment throughout the plastic.

Applications

- Masterbatch
- Polyethylene blow-molded containers
- Rotational molding
- Thin film applications

Available Colors

Product 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

Packaging:

1 box = 55lb (25kg)
 1 box = 44lb (20kg)

Storage & shelf life:

120 months when kept in closed original packaging in a dry place at ambient temperature.

Safety & regulatory:

Safety Data Sheet available on request.

Physical properties

Delivery form	Powder
Specific gravity	1.20 g/ml
Average particle size	20-60 µm
Oil absorption	53g/100g pigment
Bulking value	28-31 lbs./ft ³

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Processing & Heat Stability	
Minimum Processing Temp	Recommended minimum processing temperature is 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)
Solvent resistance	Insoluble in water, hydrocarbons and many common solvents
Pigments must be completely melted and evenly distributed throughout the plastic system	

(1) Test methods and Certificate of Analysis (COA) available on request.

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 additives 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".

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

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