

# **Technical Data Sheet**

## **ZQ™** Pigments

#### **General description**

DayGlo<sup>®</sup> ZQ<sup>™</sup> 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 = 55 lb (25 kg)

1 box = 44 lb (20 kg)

#### Storage & shelf life:

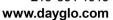
120 months when kept in closed original packaging in a dry place at ambient temperature.

#### 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./ft³	

**Disclaimer:** Our technical advice, information, statements, whether given verbally, in writing, or in the form of test results, is offered for your guidance without warranty. No warranty for fitness for a particular purpose is made. This also applies where protective rights of third parties are involved. It does not release the user from obligation to test the suitability of the products and formulas for the intended process and applications. Our guarantee is limited to the consistent quality of our product.





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				

<sup>(1)</sup>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	+/-		
lonomer	+/-	Urethane	+/-		

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