

# Technical Data Sheet

## RPCF

### General Description

- Daylight and ultra-violet fluorescent plastic colorants for food contact applications with FDA compliancy and also meeting the composition requirements of resolution AP89(1).
- A dyed/pigmented thermoplastic polyamide-ester copolymer.

### Applications

- Plastics for single and repeated use applications in contact with all food types.
- Particularly recommended for Polyolefins (LDPE/HDPE/PP)

### Product Features

- Please consult the Keller and Heckman opinion letters concluding that RPCF-series pigments are compliant to the mentioned FDA directives as amended till date of this opinion letter. The Keller and Heckman opinion letter<sup>(A)</sup> defines the approved conditions of use of RPCF in food contact materials.
- In compliance with Food and Drug Administration status (FDA): up to 1% in HDPE, PP for single and repeated use applications in contact with all foods under conditions of use E-G defined in 21 CFR 176.170(c): room temperature filled and stored, refrigerated storage and frozen storage (no thermal treatment in the container).<sup>(A)</sup>
- All monomers are included in the EU list of authorized substances of regulation (EU) No 10/2011.
- Developed to meet the composition requirements of resolution AP89(1) (Use of Colorants in Plastic Materials coming into Contact with Food). For further details please consult our AP89(1) declaration. It is necessary that the manufacturer conducts adequate testing on the final product to determine if it is EU food contact compliant. We are able to provide information to a third party under NDA to help facilitate this.
- All batches of RPCF series are produced under special controlled validated conditions.
- RPCF series exhibits negligible, if any, mold plate-out and excellent heat stability.
- To ensure complete development of the fluorescent color effect, it must be completely melted and evenly distributed throughout the plastic system.
- RPCF colors can be blended to achieve intermediate fluorescent colors.

<sup>(A)</sup> For approved conditions of use, request the Opinion letter from Keller and Heckman.

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| Standard Colors  |             |
|--|-------------|
| Product Name   | Description |
| RPCF-10  | Chartreuse  |
| RPCF-14  | Orange Red  |
| RPCF-18  | Magenta     |
| <b>Packaging:</b><br>1 box = 20kg<br>MOQ = 20kg  |             |
| <b>Storage &amp; shelf life:</b><br>120 months when kept in closed original packaging in a dry place at ambient temperature. |             |
| <b>Safety &amp; regulatory:</b><br>Safety Data Sheet available on request.   |             |

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### Physical properties

|                                   |  |
|-----------------------------------|--|
| Delivery form                     | Powder                                   |
| Particle size (Laser diffraction) | 8 – 16 $\mu\text{m}$ / <15 $\mu\text{m}$ |
| Melting point                     | 125 – 150 °C                             |
| Specific gravity                  | 1.20 g/ml                                |
| Bulking value                     | 0.30 – 0.40 g/ml                         |

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

### Processing

It is essential that the minimum processing temperature of 170°C is reached in order to melt in the polymer and evenly distribute the pigment throughout the plastic.

To minimize the influence of heat on the fluorescent properties, temperature impact needs to be held as low as possible.

RPCF pigments are designed for use at industrial sites as described in EU COMMISSION REGULATION 2023/2055 of 25 September 2023.

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