

## RT712F Synthetic Plastic Type Polyurethane Rheological Agent

### Product Description

RT712F is a non-ionic, highly pseudo plastic, hydrophobic-modified polyurethane rheological agent with exceptional thixotropy. It is ideal for true stone paint and high-gloss low VOC systems, effectively improving low shear viscosity while delivering outstanding pseudo plasticity and suspension performance. This agent enhances the sprayability and sand resistance of true stone paint, while also providing water-based coatings with superior rheological properties, high gloss, and a durable, full-film finish. It exhibits excellent brush retention, splash resistance, water resistance, and water separation resistance. The product features low foaming, excellent film-forming properties, high transparency, and prevents fogging defects. Additionally, it offers antimicrobial and anti-mold properties. Free from metal organic tin, it is an environmentally friendly product.

### Typical Properties

| Property                       | Typical values                                                            |
|--------------------------------|---------------------------------------------------------------------------|
| Appearance                     | A slightly turbid to transparent liquid with a faint characteristic odor. |
| Solid content(wt%)             | 20±1%                                                                     |
| pH value(20°C)                 | 7±2                                                                       |
| Density(g/ml,20°C)             | 1.04±0.02g/ml                                                             |
| Brookfield viscosity(cP, 25°C) | <8000 knots                                                               |

### Use & Compatibility

RT712F is recommended to be added at a concentration of 0.05-0.5%, and should be slowly incorporated while stirring to ensure thorough dispersion at high speed. It is suggested to add this additive prior to emulsification to achieve high gloss performance. The dosage should be appropriately adjusted according to the viscosity requirements of the product.

The RT712F is engineered for diverse coating formulations, delivering performance across matte to high-gloss finishes for both interior and exterior walls. It excels in styrene acrylic, pure acrylic and vinyl-acrylic systems, with particular excellence in high-gloss, high-hardness surface finishing. Widely adopted in water-based industrial paints, it prevents fogging defects while ensuring rich film coverage. This makes it an ideal choice for spray applications.

RT712F has good compatibility with cellulose thickeners and alkali-swelling thickeners, and can be freely

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combined with them.

RT712F can be used as a main thickener or as a co-thickener to achieve excellent flowability.

## **Packaging and Storage**

Packaged in 50kg and 200kg IBC plastic drums, the container remains sealed. With a storage period of 12 months at 5-35°C and protected from light and heat.

## **Customer Notice**

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

CELOTECHRUICO does not warrant or guarantee the effectiveness of our products added to any textile fiber or fabric. Before putting into mass production, multiple trials and tests must be done in accordance with your company's production technology, in order to obtain the corresponding certified standard. Mix well before use.

CELOTECHRUICO strongly encourages its customers to review both their manufacturing processes and their applications of CELOTECHRUICO products from the standpoint of human health and environmental quality to ensure that CELOTECHRUICO products are not used in ways for which they are not intended or tested.

CELOTECHRUICO personnel are available to answer your questions and to provide reasonable technical support. CELOTECHRUICO product literature, including safety data sheets, should be consulted prior to use of CELOTECHRUICO products. Current safety data sheets are available from CELOTECHRUICO.