

ELEMENTIS

RHEOLATE® IF Series

Fit for future with advanced safer rheology ingredients for architectural formulas



Embrace sustainable future with our safer rheology

As the world prioritizes health and safety, the demand for safer paints has surged. Stricter regulations dictate labeling compliance and adherence to elevated standards. In this changing climate, our RHEOLATE® IF series is purposefully crafted to fulfill these requirements. With labeling-compliant products, you can confidently meet end-users' expectations and stay ahead of the curve.

The benefits and features of our innovative product range

Designed to provide a tailored rheology profile, this series utilizes safer ingredients to ensure compliance and product safety. By choosing our IF series, you can say goodbye to isothiazoline-containing biocides and enjoy a more sustainable and safer solution.

Discover the numerous benefits of our RHEOLATE® IF series:

Customizable

Our RHEOLATE® IF series consist of a broad portfolio with different shear levels. This enables you to design your own rheology profile, providing you with greater control over your product's performance.

With our innovative products you can realize your own flow & leveling identity with superior spatter resistance while enhancing dry film properties and efficiency.

Safer ingredients

The RHEOLATE® IF series uses safer ingredients that are Tin and APEO free, ultra low in VOC and free from isothiazoline-containing biocides, making it a more sustainable and safer option for your business.

Future-proofing

Our RHEOLATE® IF series is designed with the future in mind, ensuring that you stay ahead of the curve and are prepared for any changes in regulations or consumer demand. Suitable for EU Ecolabel, Nordic Swan, Blaue Engel, Asthma Allergy Nordic, French NF and many more.



Rheology modifiers

TABLE 1

RHEOLATE® IF series rheological modifiers

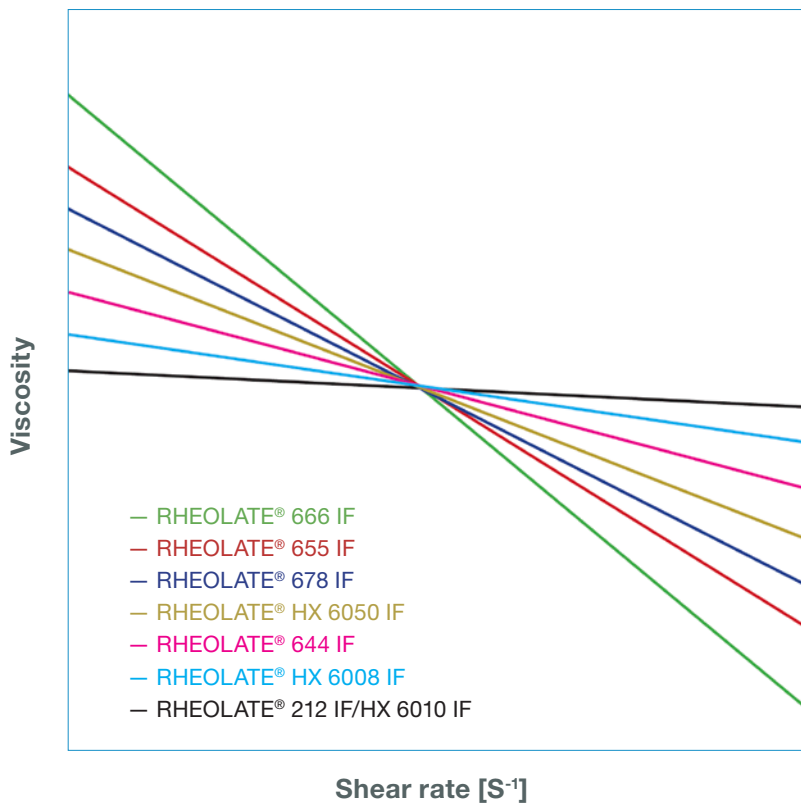
Polyether polyurethane associative		
Product name	Shear rate	Key properties
RHEOLATE® 212 IF	High shear	VOC-free, designed for use in high performance latex paints with superior spatter resistance and good color acceptance. Main use is architectural paints.
RHEOLATE® HX 6050 IF	Mid- and high shear	Highly efficient, zero VOC, APEO free with outstanding application properties e.g. spatter and sag resistance. Excellent efficiency with hydrophilic resins and significant low-mid shear contribution.
RHEOLATE® HX 6010 IF	High shear	Highly efficient, zero VOC, APEO free. Excellent efficiency in all resin systems with excellent balance of sag and leveling.
RHEOLATE® HX 6008 IF	Mid- and high shear	Efficient, zero VOC, APEO free. Excellent efficiency with both hydrophobic and hydrophilic resins with some low-shear contribution; dedicated for acrylic, S/A, alkyd and PU emulsions.
RHEOLATE® 678 IF	Mid- and high shear	Solvent, APE & tin-free, thickener for latex paints and other waterborne coatings. It can be used as single thickener for architectural wall paints. Improved film built and good spatter resistance can be expected.
RHEOLATE® 655 IF	Mid shear	Designed for use in low VOC decorative systems. Providing thickening efficiency primarily in the medium-shear rate range (Stormer, KU) viscosity.
RHEOLATE® 666 IF	Low shear	VOC compliant, solvent free, APE-free, provides viscosity at low and medium-shear rates and provides effective flow and leveling control.
RHEOLATE® 644 IF	Mid- and high shear	Good mid-high-shear viscosity build. Higher KU build in small particle-size binders than RHEOLATE® 212 IF. Best balance of KU/ICI viscosities, solvent- and biocide free version of RHEOLATE® 244.



RHEOLATE® IF - Rheology profile

The wide rheology profile range of RHEOLATE® IF Series offers customized rheological properties to optimize product performance in paints and coatings industry.

FIGURE 1



RHEOLATE® IF thickeners comply with the latest regulatory changes

Moreover, with the regulatory changes made by the European Chemicals Agency (ECHA) in 2020*, it has become increasingly important for companies to comply with labeling requirements related to biocides.

With the RHEOLATE® IF thickeners, you can comply with ECHA regulatory changes in the European Union. Our product allows you to avoid the use of biocides that contain isothiazolinones, which are known sensitizers that can cause allergic reactions for sensitive individuals.

With our focus on product safety and compliance, Elementis aims to provide products that meet your needs while keeping your business compliant with changing regulations.

TABLE 2

	RHEOLATE® 212 IF	RHEOLATE® HX 6008 IF	RHEOLATE® HX 6010 IF	RHEOLATE® HX 6050 IF
Product Hazard Classification	not classified	H315 H318	H315 H318	H318
VOC content	<0,02%	<0,2%	<0,15%	<0,1%
SVOC content	<5%	<0,1%	<0,1%	<0,02%
BHT (Additive) (H410)		<0,1%	<0,1%	<0,1%
EU Ecolabel	•	•	•	•
Nordic Swan	•	•	•	•
Blauer Engel		•		•
Asthma Allergy Nordic		•		•
French NF Environmental	•	•	•	•

TABLE 3

	RHEOLATE® 678 IF	RHEOLATE® 655 IF	RHEOLATE® 666 IF	RHEOLATE® 644 IF
Product Hazard Classification	H318	H315 H318	H315 H318	H315 H318
VOC content	<0,2%*	<0,2%*	<0,2%*	<0,2%*
SVOC content	-*	-*	-*	-*
BHT (Additive) (H410)	<0,1%	<0,1%	<0,1%	<1%
EU Ecolabel	•	•	•	•
Nordic Swan	•			
Blauer Engel	•			
Asthma Allergy Nordic	•	•	•	•
French NF Environmental	•	•	•	•

* theoretical content based on composition.

• = Product could be allowed to use under consideration of label limits and restrictions as an ingredient for the final product



The focus on eliminating biocides containing BIT/MIT

The development of the RHEOLATE® IF series was primarily focused on removing biocides containing BIT/MIT. We aimed to create a product that was safe for future regulatory changes while maintaining the same level of bio protection and rheological performance as established biocide-containing products.

To ensure the effectiveness of our product, we conducted scientific bio challenge testing at independent external laboratories, following ASTM norms. The results showed that RHEOLATE® IF type thickener provides the same level of bio protection as biocide-containing products.

Moreover, internal studies in various paint chemistries ensures the product provides the same rheological performance as established biocide-containing products.

We invest in research and development to provide tailored products to meet your needs and connect with the future.

The partner in building tomorrow's formulations through unique ingredients, solutions & expertise

Advanced Broad Technology Toolbox

"Through unique ingredients, solutions & expertise we enable paint manufacturers to create high performance, safer and more sustainable paints."

Rheology Leadership

"Strong and deep expertise in rheology while having the widest portfolio of rheology products to design your own rheology profile."

Market-led Innovations

"Access to unique proprietary big data market insights that enables us to create market-led and customer centric innovations."

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NOTE:

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Unique chemistry,
sustainable solutions