

TECHNICAL DATA SHEET

CRAYVALLAC® SLX

Micronised polyamide rheology modifier for medium temperature processing conditions

Polyamide



91% bio-based product

TYPICAL CHARACTERISTICS

Nature	Polyamide
Appearance	Off-white micronized powder
Solid Content (%)	100
Active Content (%)	100
Specific gravity	0.99
Particle size distribution	DV. 1 min: 1.8 µm / DV. 9 max: 15.0 µm
Bulk density	0.4-0.6
Melting Point (°C)	128
Total Bio content (%)	93

DESCRIPTION

CRAYVALLAC® SLX is a high performance micronised amide wax rheology modifier designed for the low temperature manufacture of moisture curing methoxysilane systems, where processing temperatures typically lie within the range 60 - 90°C. CRAYVALLAC® SLX particles are converted to an interacting network of crystalline fibres. It is this network that gives rise to the shear thinning rheology. This shear thinning characteristic provides for a low viscosity at the shear rates associated with application by extrusion, and a very high viscosity under the low shear rates experienced after application. The net result is ease of application followed by excellent sag and slump resistance.

RECOMMENDED ADDITION LEVEL

1-5% under heat and shear

STANDARD PACKAGING

Other packaging may be available upon request

- 15 Kg Bag

HANDLING & STORAGE

It should be stored in the original containers in a dry place at temperatures between 5°C (41°F) and 30°C (86°F). Avoid exposure to direct sunlight or frost. In these conditions, this product should be used within 48 months from production.

MARKETS

Adhesives & Sealants

- Assembly
- Other Adhesives
- Sealants

KEY BENEFITS

FORMULATION

- Easy handling



STORAGE

- Antisettling
- In-can appearance
- Syneresis resistance
- Viscosity stability



APPLICATION

- Gunnability
- Slump resistance
- Temperature resistance



- APEO Free*
- Heavy Metal Free*
- Solvent Free*

** Not intentionally added but not specifically measured (not part of product specification)*

- Total Bio content (%) **93**

THICKENING MECHANISM

Non Associative



VISCOSITY CONTRIBUTION

Low Shear contribution
Mid Shear contribution



PROCESSING INSTRUCTIONS

The activation process constitutes the conversion of the CRAYVALLAC® SLX particles to an interacting network of crystalline fibres. It is this network that gives rise to the shear thinning rheology. This shear thinning characteristic provides for a low viscosity at the shear rates associated with application by extrusion, and a very high viscosity under the low shear rates experienced after application. The net result is ease of application followed by excellent sag and slump resistance. Activation at too low a temperature, or for too short a time, will result in the formation of an inefficient interacting network and consequently poor sag and slump resistance.

The successful manufacture of methoxysilane based sealants is very dependent on the careful control of moisture levels throughout manufacture and storage. For this reason it is normal practice to pre-dry all pigments and extenders prior to dispersion with the methoxysilane polymer. Alternatively, special grades of low moisture content ingredients may be used. The use of vacuum processing is essentially there to prevent the take up of moisture during processing. Due to the lower processing temperature used, the vacuum processing is not particularly efficient at removing unwanted water residues introduced with the raw materials. Therefore a greater emphasis must be put on the pre-drying of pigments and extenders, or the purchase of special grades of low moisture content raw materials.

With moisture cured methoxysilane based sealants, we strongly recommend that all additives be quickly dispersed and not allowed to remain in direct contact with the resin component. Prolonged contact may sometimes result in the formation of an insoluble fine skin which later appears as small particles in the final sealant.

HEALTH AND ENVIRONMENTAL DATA

For safe handling please refer to the Safety Data Sheet. For more information about health and environmental data, please contact us.

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