

Product Information

DEGACRYL® HS 4251 E

Solvent-based binder for heat seal lacquers

PRODUCT DESCRIPTION

Solvent-based binder for heat seal lacquers designed for direct coating of aluminum. Along with smooth peel properties, it can be sealed with all common polar and non-polar substrates like PS, PET or PP. Its solvent composition is n-butyl acetate-free.

Typical Properties

Property	Unit	Value
Chemical Name		Organic dispersion of copolymers on methacrylic esters and olefinic basis
Density DIN EN ISO 1183-1	g/cm ³	0.93
Flash Point, min. DIN EN ISO 1523	°C	-12
Glass Transition Temperature DIN EN ISO 11357-1	°C	-51
Glass Transition Temperature DIN EN ISO 11357-1	°C	44
Molecular Weight DIN 55672-1	g/mol	362,000
Solvent		n-propyl acetat / ethyl acetat / isooctane 53 / 38 / 9
Viscosity Dynamic Viscosity DIN EN ISO 3219	mPa·s	1000-4000
Viscosity Number DIN EN ISO 1628-1	cm ³ /g	142

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

Usage as a binder for PVC-free heat seal lacquers with direct adhesion for sealing aluminum or PET film versus polypropylene, polystyrene or vinyl.

- Food packaging (e.g. easy or strong peel packaging, PVC-free packaging, foil or film lid packaging, foil to foil applications)
- Pharmaceutical packaging (e.g. push through blister, sachet packaging, easy peel packaging, foil to foil applications)

Product Composition

Product Composition

Solids Content

Unit

Value

%

44-46

DIN EN ISO 3251

The data represents typical values (no product specification)

BENEFITS & ADVANTAGES

- excellent seal and peel properties on aluminum foil or film structures
- direct adhesion on aluminum, no need for adhesion promotor like PVC-terpolymer
- outstanding smooth peel effect
- wide property range: from easy opening to high sealing strength
- multi-purpose sealing capabilities to various substrates
- economical and environmental friendly packaging solutions

DOSAGE

We are pleased to send guideline formulations.

HANDLING & PROCESSING

General

Organic dispersion with the usage as binder for heat seal lacquers for sealing aluminum or primed PET film versus polypropylene, polyethylene, polystyrene, polyethylene terephthalate or vinyl.

Before processing

DEGACRYL® HS 4251 E must be stirred well, since storage can lead to phase separation. Recommendation to use complete material (full packaging size) for final heat seal lacquer formulation.

Dilutability

DEGACRYL® HS 4251 E is dilutable with esters and ketones.

Drying

After brief airing, 15 seconds at 180 °C under lab conditions.

Recommended dry film thickness of DEGACRYL® HS 4251 E is 7 g per sqm.

PACKAGING

Open top steel drums: 175 kg net

Recycable IBC with PE insert: 850 kg net

STORAGE

Stored tightly closed in a cool place.

SHELF LIFE

1 year after date of delivery under above mentioned storage conditions.

Registration Listings

Registry

Status

Australia (AIRC)

No

Canada (DSL)

Yes

Switzerland (ChemO)

No

Simplified notification under specific conditions. Valid only for specific importer.

China (IECSC)

Information on Request

EU (REACH)

Yes

EU-REACH compliant for Evonik Operations GmbH and its affiliates as EU manufacturer/EU importer.

Japan (ENCS)

Yes

South Korea (KECL)

No

Mexico (INSQ)

No

New Zealand (NZIoC)

No

Philippines (PICCS)

No

Taiwan (TCSI)

No

United States of America (TSCA)

Yes

ACTIVE: Commercial Status: Active

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