

Product Information

DEGACRYL® HS 4174 E

Solvent-based binder for heat seal lacquers

PRODUCT DESCRIPTION

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

Typical Properties

Property	Unit	Value
Chemical Name		Organic dispersion of copolymers on methacrylic esters, olefinic and polyester basis
Density DIN EN ISO 1183-1	g/ml	0.92
Flash Point, min. DIN EN ISO 1523	°C	-4
Glass Transition Temperature DIN EN ISO 11357-1	°C	-48
Glass Transition Temperature DIN EN ISO 11357-1	°C	33
Molecular Weight DIN 55672-1	g/mol	250,000
Solvent		n-propyl acetat / ethyl acetate / isooctane 64 / 25.9 / 10.1
Viscosity Dynamic Viscosity DIN EN ISO 3219	mPa·s	1000-3500
Viscosity Number DIN EN ISO 1628-1	cm ³ /g	171

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

Usage as a binder for heat seal lacquers with direct adhesion for sealing untreated PET film or aluminum foil versus polypropylene, polystyrene, PET, PLA 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	Unit	Value
Solids Content	%	46-48
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 foil and PET film
- 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 PET film versus polypropylene, polyethylene, polystyrene, polyethylene terephthalate or vinyl.

Before processing

DEGACRYL® HS 4174 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 4174 E is dilutable with esters and ketones.

Drying

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

Hints for application

A heat seal lacquer based on DEGACRYL® HS 4174 E is directly applicable to aluminum, PET or paper. Priming is not mandatory necessary.

Recommended dry film thickness of DEGACRYL® HS 4174 E is 5-7 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 (AIIIC)	No
Canada (DSL)	No
Switzerland (ChemO)	No
China (IECSC)	Yes
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)	No

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