

## Product Information

# DEGACRYL® HS 555

Solvent-based binder for heat seal lacquers

## PRODUCT DESCRIPTION

Solvent-based binder for heat seal lacquers designed for coating on aluminum when co-formulated with PVC. 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   |
|---|--------------------|---|
| <b>Chemical Name</b>                                      |                    | Organic dispersion of copolymers on methacrylic esters and olefinic basis |
| <b>Density</b><br>DIN EN ISO 1183-1                       | g/cm <sup>3</sup>  | 0.90  |
| <b>Flash Point, min.</b><br>DIN EN ISO 1523               | °C                 | -4  |
| <b>Glass Transition Temperature</b><br>DIN EN ISO 11357-1 | °C                 | -48   |
| <b>Glass Transition Temperature</b><br>DIN EN ISO 11357-1 | °C                 | 29  |
| <b>Molecular Weight</b><br>DIN 55672-1                    | g/mol              | 300,000   |
| <b>Solvent</b>  |                    | butyl acetate / methyl ethyl ketone<br>70 / 30                            |
| <b>Viscosity</b><br>Dynamic Viscosity<br>DIN EN ISO 3219  | mPa·s              | 500-1500  |
| <b>Viscosity Number</b><br>DIN EN ISO 1628-1              | cm <sup>3</sup> /g | 163   |

The data represents typical values (no product specification)

## TYPICAL APPLICATIONS

Usage as a binder for heat seal lacquers for sealing aluminum or PET film versus polypropylene, polystyrene or vinyl.

- Food packaging (e.g. easy or strong peel 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      | %    | 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
- 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 555 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 555 is dilutable with esters and ketones.

### Drying

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

### Hints for application

In order to ensure the adhesion to aluminum foil, the latter should be primed (1 - 2 g per sqm dry film thickness) with a PVC copolymer, e.g. Vinnol® H 15/45 M from Wacker Chemie or in combination with the ratio of 95/5 (solid to solid). Recommended dry film thickness of DEGACRYL® HS 555 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 (AIIIC)  | Yes    |
| Canada (DSL)   | Yes    |
| China (IECSC)  | Yes    |
| EU (REACH)<br>EU-REACH compliant for Evonik Operations GmbH and its affiliates as EU manufacturer/EU importer. | Yes    |
| Japan (ENCS)   | Yes    |
| South Korea (KECL)   | Yes    |
| Mexico (INSQ)  | No     |
| New Zealand (NZIoC)  | Yes    |
| Philippines (PICCS)  | Yes    |
| Taiwan (TCSI)  | Yes    |
| United States of America (TSCA)<br>ACTIVE: Commercial Status: Active   | Yes    |

#### Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

#### Evonik Operations GmbH

Coating & Adhesive Resins  
Paul-Baumann-Straße 1  
45764 Marl  
Germany  
Phone +49 2365 49-4843  
[evonik.click/adhesive-resins](https://www.evonik.com/en/evonik.click/adhesive-resins)