LANDU

Technical data sheet
TDS-DUVERA-5040-L-EN
Revision 1.0, November 2026

LANDUSIL DUVERA

5040-L

Mono-Hydroxyl-Terminated Polysiloxane

Monocarbinol-terminated PDMS for coatings, polyurethanes and polyester resins

Chemical identity

Chemical name
Monocarbinol-terminated polydimethylsiloxane

CAS number
See SDS

Reactive group
One primary hydroxyl (C–OH) group

Other end group
Alkyl (non-reactive)

Physical form
Liquid

Product description

LANDUSIL DUVERA 5040-L is a polydimethylsiloxane with one primary hydroxyl (carbinol) group at one chain end and an inert end group at the other. It is a liquid of about 60 – 140 mm²/s with a molecular weight of about 5,000 g/mol.

Because only one end reacts, the fluid grafts onto isocyanate, anhydride or melamine chemistries as a side-chain or terminal siloxane segment without chain extension. It is used to modify coating resins, polyurethane adhesives, polyesters and alkyds.

Features and benefits

- One primary hydroxyl group per chain
- Grafts without chain extension
- Reacts with isocyanate, anhydride, melamine
- Adds slip and low surface energy to resins
- 100 % active, no solvent

Specification

Property	Unit	Value	Test method
Appearance		**Clear liquid**	Visual
Kinematic viscosity, 25 °C	mm²/s	**60 – 140**	Capillary viscometer, 25 °C

Tested on every batch and reported on the Certificate of Analysis.

Typical properties

Molecular weight	approx. 5,000 g/mol
Refractive index, nD25	approx. 1.405
Density, 25 °C	approx. 0.97 g/mL

For guidance only; not part of the specification.

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Applications

Coating resin modification
Slip and release in coating resins.

Silicone-organic polymer manufacture
Single-end macromer for graft copolymers.

Polyurethane adhesive development
Siloxane segment in polyurethane adhesives.

Polyester and alkyd resin modification
Hydroxyl-functional siloxane for polyester and alkyd.

Guidelines for use

Incorporation	Add the fluid to the polyol or resin side before the hardener and check clarity of the cured film.
Level	Start with low levels and check surface slip, recoating and adhesion.

These levels are starting points. Determine the optimum level and method in trials under your own conditions.

Handling and safety

- Avoid contact with eyes.
- Spilled fluid makes floors very slippery; clean up immediately.
- Read the Safety Data Sheet before use.

Storage and shelf life

Store in tightly closed original containers in a cool, dry place. Shelf life is 12 months from the date of manufacture in unopened containers.

Packaging

25 kg plastic drum, 200 kg steel drum, 1,000 kg IBC. Other pack sizes on request.

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