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Phone: +86-21-6119-1052 Fax: +86-21-6119-1075



Dynasylan® SIVO CLEAR EC

Coating System for Oil-, Water-, and Dirt-Repellent Treatment of Smooth Inorganic Surfaces

Chemical Formula

For further information please write to sivoclear-info@degussa.com

Description

Dynasylan® SIVO CLEAR EC is an one-component user-friendly coating system for smooth surfaces such as glass and glazed ceramic.

The consumption **Dynasylan**® SIVO CLEAR EC depends on the application method, mostly about 30 - 50 ml/m² are sufficient.

Product Properties and Benefits to the User

Treatment of windshields:

- Better visibility in the rain, particularly on throughways and rural roads
- In winter: obviates time-consuming de-icing
- In summer: insect splatter easier to remove

Easy-to-clean glass components of shower stalls, sanitary ceramics:

- Lime and soap residues easy to remove
- Aggressive cleaning agents are not needed. A wet cloth is generally sufficient.

Easy-to-clean surfaces on other glass objects (e.g. greenhouses, canopies, skylights, etc.):

- The cleaning cycle is extended.
- · Less cleaning agent is needed.
- Dirt is easier to remove.

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Technical data

Property	Value	Unit	Method
Flash point	12,5	°C	DIN 51755
Density (20 °C)	0.79	g/cm3	DIN 51757
Viscosity (20 °C)	2,5	mPa.s	DIN 53015

Applications

Use on Smooth Inorganic Surfaces (e.g. Glass, Ceramic)

Application ProcedureDo not apply the product at temperatures <u>below 10 °C</u>! Do not expose surfaces to be treated to sunlight! Make sure that the surface is not hot. Provide adequate ventilation and fresh air!

Before application the surface has to be cleaned! The optimum temperature for the treatment is 15-25 $^{\circ}$ C.

Step 1: Cleaning the SurfaceIn order to permit sufficient chemical bonding of **Dynasylan**® SIVO CLEAR EC to the substrate, the surfaces have to be carefully cleaned before the application. The long-term stability and abrasion resistance of the coating depends on how well **Dynasylan**® SIVO CLEAR EC is chemically bonded.

The surfaces to be treated can be cleaned with a commercial glass cleaner. After that they should be polished until the surface is dry. For an optimum pre-treatment of the surface, especially for automotive glass, we recommend an abrasively cleaning with a 30 % aqueous cerium oxide* slurry. The slurry should be shaken thoroughly before use. The cerium oxide slurry can be applied with a cotton cloth or paper towel and should be polished uniformly as a thin liquid film for several minutes. Subsequently, the film is allowed to dry. The dried cerium oxide is wiped off with a clean, dry paper cloth (it may have to be repolished several times with a new paper cloth). The cerium oxide should be completely removed. The abrasive cleaning ensures a completely clean and reactive glass surface. Just after the abrasive cleaning, the surface should be coated.

 * Supplier: Cerium oxide, 99% pure (corn size 2-3 μ m); AUER-REMY GMBH, Baumwall 5, D-20459 Hamburg, Telephone: 0049-(0)40-36 90 01-0 or Goldmann, www.gold-mann.de, Schillerstrasse 79, D-33609 Bielefeld, Tel.: 0049-(0)521-93278-0

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Step 2: Treatment Process

Direct exposure to sunlight during application should be avoided. In the case of windshield treatment, the two halves of the windshield (left/right) should be treated one after the other. A certain amount of the **Dynasylan**® SIVO CLEAR EC is applied as a thick liquid film and should be polished quickly and uniformly with paper towel for at least ½ -1 minutes. In case the solvent evaporates before it has been uniformly polished in, more product needs to be applied. Do not let the film dry sporadically. **Before** the liquid film dries, excess **Dynasylan**® SIVO CLEAR EC should be polished off with a clean paper cloth. Residues of dried formulation and grey streaks can be polished off completely using a small amount of **Dynasylan**® SIVO CLEAR EC and a clean paper cloth. After application the coating should be air dried for about 30 minutes.

In the case of windshield treatment please do not use the wipers during this time.

A hydrophobic effect generally can be seen depending on the substrate, reactivity and temperature after about 5–15 min and is further enhanced after a few minutes.

Renewing Already Coated Glass Surfaces

The coating with <code>Dynasylan®</code> SIVO CLEAR EC is long-lasting. Once the effects wear off, the surface can be re-coated. For a re-coating the cleaning with cerium oxide and the application of <code>Dynasylan®</code> SIVO CLEAR EC are done in the same way as the first treatment. If the glass was treated with a different coating before, repeated treatment with an abrasive cleaner is vital.

Special note to polishing cloths

Do not use microfibre or cotton cloths for the polishing of **Dynasylan®** SIVO CLEAR EC in Step 2.

Recommendation for polishing cloths:

Multitex white or blue viskose cloths from ZVG-Zellstoff-Vertriebs-GmbH. Wypall X60 / Kimnet cloths – Quarter Fold Pack Code 6034 from KIMBERLY-CLARCK Proffessional (USA) (paper cloths 36,5 x 31,5 cm)

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Registration

EINECS/ELINCS (EU):	Yes	
AICS (Australia):		
DSL/NDSL (Canada):		
PICCS (Philippines):		
TSCA (USA):		
IECSC (P.R. China):	LVE	
ENCS (Japan):	Yes	
ECL (South Korea):	LVE	

Safety and Handling

Before considering the use of Dynasylan® products please read its Material Safety Data sheet (MSDS) thoroughly for safety and toxicological data as well as for information on proper transportation, storage and use. The Material Safety Data Sheet is available after registration on our website www.dynasylan.com or upon request from your local representative or customer service.

Packaging and Storage

Dynasylan® SIVO CLEAR EC is delivered in PE cans (20 kg) and steel drums with plastic linings (150 kg).

Dynasylan® SIVO CLEAR EC is storage-stable for at least 12 months in originally sealed containers.

Dynasylan® SIVO CLEAR EC-EN-2007-12

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