



Technical Data Sheet

DURALON USF



Hydrophobic and Oleophobic Coating

GENERAL PHYSICAL PROPERTIES

PROPERTIES (*)	UNIT	DURALON USF	SiO2 STANDARD SURFACE
Contact angle of water	°	110-112	48
Surface tension	mN/m	12.5	54
Static friction coefficient (1)	-	0.06	0.25
Easy to clean performance	-	Excellent	Poor
Anti-fingerprint performance	-	Good	Poor
Abrasion resistance (2)	°	105-107	-

(*) Typical properties are not suitable for specification purposes

(1) Measured with cheese cloth

(2) Contact angle of water after 6,400 abrasion strokes with cotton cloth; weight load: 2.5 kg; stamp size: 15 mm x 25 mm; force: 0.66 kg/cm²; stamp hardness: 66A

APPLICATION METHODS

Dry application methods	PVD (Physical Vapor Deposition)
Wet application methods	Spray, Dip, Spin, Flow

SUMMARY

DURALON USF is an innovative surface modification, by using fluorinated polyether, to create a durable, mono-molecular anti-smudge surface.

APPLICATIONS

DURALON USF is the most effective for glass and SiO₂ coated surfaces.

- Ophthalmic lenses
- Optical lenses
- Optical filters
- Displays
- Mirrors
- Glass

FEATURES

DURALON USF adds the following characteristics to the surface.

- Anti-smudge, reduction of dirt transfer to the surface
- Easy to clean, Improvement of cleanability
- Hydrophobic, improvement of water repellency
- Oleophobic, improvement of oil repellency
- Durability, abrasion resistant and protection against micro-scratches
- Low friction, improvement of surface smoothness
- Low refractive index, highly transparent in the visible spectrum
- Drop in solution for your process



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CONTACT INFORMATION

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PROCESS PARAMETERS

Standard process parameters available upon request

STORAGE AND HANDLING INSTRUCTIONS

Impregnated tablets for dry application methods (PVD):

Storage cool and dry between 4°C and 25°C

Warm up to room temperature before use

Liquid solution for dry application methods (PVD):

Storage cool and dry between 4°C and 6°C

Warm up to room temperature before use

Liquid solution for wet application methods (Spray, Spin, Dip, Flow):

Storage cool and dry between 4°C and 6°C

Warm up to room temperature before use

PACKAGING INFORMATION

Impregnated tablets for dry application methods (PVD):

Tablets are separately sealed with additional inert gas

Liquid solution for dry application methods (PVD):

Details upon request

Liquid solution for wet application methods (Spray, Spin, Dip, Flow):

Details upon request

HEALTH AND SAFETY INFORMATION

Before using this product, read and understand the Safety Data Sheet, SDS, which provides information on health, physical, and environmental hazards, handling precautions and first aid recommendations. For a copy of an SDS, contact a sales or customer service representative.

WARRANTY AND LIABILITY LIMITATIONS

Information contained herein is accurate to the best of our knowledge. The coating solution properties and cured coating properties listed herein represent typical values for DURALON USF and are not meant as specifications. COTEC GmbH insists that users conduct their own tests for applicability and fitness for any purpose. Statements concerning use of products or formulations described herein shall not be construed as a warranty or license to infringe any patent or trademark, and no liability for infringement arising out of such use is assumed. Please refer to COTEC Terms and Conditions or to your Purchase Agreement with COTEC for the warranty coverage of COTEC's product.

PRODUCT SHIPPING AND AVAILABILITY

Typical lead-time for shipment of COTEC is depended on product ordered and is listed in confirmation of purchase order. COTEC provides several shipping options. Please contact an COTEC representative to determine which option best fits your needs. All orders are shipped FCA, excl. packaging, except other shipping options are fixed in a contract. Additional shipment charges including customs clearance and fees (if applicable) are the responsibility of the customer.

