

# INFORMATION



## Temperatures

The higher the ambient temperature the faster is the sublimation time. Air conditioning or general ventilation of the ambient air also shortens the sublimation time.



## Surface texture

Sublimation time depends on material, surface, complexity and roughness of the scanned object.



## Layer thickness of the matting agent

With a proper application of REFLECON® spray, a layer thickness of 3 µm or more is achieved.



**REFLECON® Tarnish Type 1**  
- Sublimating

**REFLECON® Tarnish Type 2**  
- Permanent

## Material suitability

The use of REFLECON® Tarnish 3D Scanningspray is suitable on the following materials:

- Metals and non-metals
- Thermoplastics such as PC, PP, PU or ABS
- Polyester, cotton, PLA fibers
- 1-component coatings, plastics, rubber: For suitability see corresponding product information
- Glass and ceramics

## Contact

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scan me • scan me • scan me

## Detailing

REFLECON® 3D Scanningsprays are used for matting and anti-reflective coating of highly reflective, mirror-like, transparent and very dark surfaces. As a result, these can be scanned better in optical measurement technology (e.g. 3D laser scanning) and complex geometries can be digitized faster and more accurately. The sprays are particularly indispensable for 3D scanning of components. The REFLECON® 3D Scanningspray is simply sprayed onto the surfaces before.



Sublimation process for REFLECON® Tarnish Type 1 products.



**TYPE 1 - SUBLIMATING**

# 11

**Tarnish 11**  
Type 1 - Sublimating

⌚ ≈ 1-3 h

Solvent based

**Product Features**

- For most plastics (except PMMA)
- For 2-component lacquer
- For uncoated objects
- Wood compatible
- Solvent based
- Free of TiO2

⌚ ≈ 1-3 h

**TYPE 1 - SUBLIMATING**

# 12

**Tarnish 12**  
Type 1 - Sublimating

⌚ ≈ 1-2 h

**Also available in bulks**

**Product Features**

- For most plastics (including PMMA)
- For single and 2-component lacquer
- For uncoated objects
- Wood compatible
- Solvent based
- Free of TiO2

⌚ ≈ 1-2 h

**TYPE 1 - SUBLIMATING**

# 13

**Tarnish 13**  
Type 1 - Sublimating

⌚ ≈ 12-24 h

Solvent based

**Product Features**

- For most plastics (except PMMA)
- For 2-component lacquer
- For uncoated objects
- Solvent based
- Free of TiO2
- Sweetish odor

⌚ ≈ 12-24 h

**TYPE 1 - SUBLIMATING**

# 50

**Tarnish 50**  
Type 1 - Sublimating

⌚ ≈ 5-8 h

**Also available in bulks**

**Product Features**

- For most plastics (exc. PVC-P)
- For 2-component lacquer
- For uncoated objects
- Solvent reduced
- Free of TiO2
- Pleasant odor
- For large objects
- Optimized cyclododecane

⌚ ≈ 5-8 h

**TYPE 1 - SUBLIMATING**

# Topo Track

**Product Features**

- Geometry and texture effect: save markers
- Greatest effect with high-resolution scanners
- For plastics: PE, PP, PET, PA
- For 2-component lacquer
- For uncoated objects
- Free of TiO2

⌚ ≈ 12-24 h

**TopoTrack**  
Type 1 - Sublimating

⌚ ≈ 12-24 h

Tracking Support

3D Scanningspray

Patent pending

**TYPE 2 - PERMANENT**

# 80

**Tarnish 80**  
Type 2 - Permanent

**Product Features**

- For all materials
- Free of solvents
- Free of TiO2
- Water based
- Easy to clean with water
- Easy to wipe off

**TYPE 2 - PERMANENT**

# 90

**Tarnish 90**  
Type 2 - Permanent

**Product Features**

- For plastics: PE, PP, PA
- For 2-component-lacquer
- For uncoated objects
- Solvent based
- Free of TiO2
- Easy to clean with water
- Easy to wipe off
- Fast drying

**Also available in bulks and as a Piccolo Pen**

# NOTES

- Sublimation time depending on object and ambient temperature (Tarnish Type 1)
- No post-cleaning of the objects (Tarnish Type 1)
- No dust residue while spraying (Tarnish Type 1) → protects the fan of the laser equipment
- Declaration acc. to GHS
- Very good, thin and uniform spray pattern
- Very good adhesion and removability of marker points
- Clean surfaces completely before use
- Minimum shelf life is 3 years at storage temperature for aerosol cans and bulks

**! The material suitability must be tested before use! The scan object should always be tested on a non-visible spot before using the scanning sprays! No liability is assumed for any damage!**