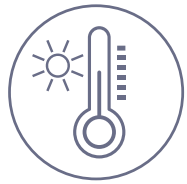


# INFORMATION



## Temperatures

The higher the ambient temperature the faster is the sublimation time. Air condition or in general ambient air ventilation is also reducing 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 film thickness of 5 - 35 µm will be achieved.



## REFLECON® Tarnish Type 1

- Volatile | Sublimating

## REFLECON® Tarnish Type 2

- Non-Volatile | 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



scan me • scan me • scan me

## Contact

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## Description

REFLECON® Tarnish 3D Scanningspray has been developed to dull reflecting, mirroring, transparent or dark surfaces for the 3D optical measurement technique. 3D laser scan allows a quick and exact non-contact measurement of complex geometries. For an optimal measurement of reflecting, mirroring, transparent or dark surfaces a Scanningspray should be applied before.



Sublimation process for REFLECON® Tarnish Type 1 Products.

TYPE 1 - SUBLIMATING

# 11

**Tarnish 11**  
Type 1 - Volatile

3D Scanningspray  
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 - Volatile

3D Scanningspray  
Solvent reduced

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 - Volatile

3D Scanningspray  
Long sublimation time

**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

# 30

**Tarnish 30**  
Type 1 - Volatile

3D Scanningspray

**Product Features**

- For uncoated objects
- For most types of lacquer
- Wood compatible
- Solvent based
- Free of TiO2

⌚ ≈ 5-15 min

TYPE 1 - SUBLIMATING

# 50

**Tarnish 50**  
Type 1 - Volatile

3D Scanningspray  
Cyclododecane

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 2 - PERMANENT

# 80

**Tarnish 80**  
Type 2 - Non-Volatile

3D Scanningspray

**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 - Non Volatile

3D Scanningspray  
100% free of titanium dioxide

Also available in bulks and as a Piccolo Pen

**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

## 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!