NASIOL

**Technical Data Sheet**

# C1

## Product Information

Nasiol C1 is an economic formula of hydrophobic and oleophobic transparent coating that is specially developed for glass and ceramic surfaces. It also provides easy-to-clean and stain-free effects to the applied surfaces.

## Application Surfaces

- Glass & Ceramics (Glazed)

Do not apply the product on surfaces including:

- Thermosets & Thermoplastics
- Window Tints
- Interior Glass of Vehicles
- Bare Ceramics

For transparent thermoset and/or thermoplastic surfaces like cell phone screens, vehicle headlights and taillights, instrument clusters, glasses, optical displays and such having similar top coatings; Nasiol® Omniphob series of products are recommended instead.

## Benefits & Key Features

- Water and oil repellency.
- Slow contamination.
- Chemical resistance.
- UV resistance.
- Easy to clean.

## Instructions

Surfaces should be dry and free of any dust, oil, grease and other contamination.

Application should be made in a shaded and well-ventilated area.

### Manual Application

*It is recommended to try on a small area before covering the entire surface.

- Product is sprayed onto a 0.5 $m^2$ area in an essential amount with a trigger bottle.
- The surface should be buffed immediately with a dry cotton cloth in circular motions.

### High Pressure Spraying

* It is recommended to apply it to the final product after the trials are made and the optimum parameters are found.

- HVLP spray guns with 0.8 mm nozzle diameter should be preferred
- The distance between the surface and nozzle can be chosen between 15-30 cm depending on the other parameters
- Spraying pressure can be chosen between 4.5-5.5 bar depending on the other parameters
- The product should be sprayed onto the surface in the essential amount with a fine atomization

## Curing

### Room Temperature Curing

Dry to touch: 3 h at 23°C - 50% RH

Fully curing: 24 h at 23°C - 50% RH

### Accelerated Curing

Dry to touch: 5 min. at 100-150°C

Fully curing: 30 min. at 100-150 °C

*Curing time and temperature can be varied according to the heat resistance of the surface to be coated.

## Application Tips

Ensure that the temperature and relative humidity (RH) of the application space are as close as possible to the given values to achieve the highest product performance.

Only work on cool surfaces.

If necessary, prepare the surface by applying Nasiol® Clean to remove any dust or contamination and dry with a clean, lint-free microfiber cloth prior to use of the product.

Shake the product gently before use.

**ARTEKYA TEKNOLOJİ LTD. ŞTİ.**
TUBITAK MAM Serbest Bölge Yeni Teknoloji
Binaları D/Z Gebze / Kocaeli / TURKEY
+90 262 642 81 54
info@artekya.com
www.artekya.com
www.nasiol.com

NASIOL

**Technical Data Sheet**

# C1

Manual Application

Do not work on an area larger than 0.5 $m^2$ at a time. Coincidence of coating areas during the application does not constitute any problem.

Spray an essential amount of product onto the surface with respect to the area and start buffing gently with the cotton cloth in a circular motion.

If the coating dries by itself on the surface until you buff or if you don't buff the surface sufficiently and because of that a hazy look occurs, immediately spray a little bit more product onto that spot and buff it again to solve the visual problem.

High Pressure Spraying

The product should be sprayed with a fine atomization. The surface should look homogeneous after the application. There shouldn't be any haze/marks on the surface.

If you had a wet looking surface after the application and because of that saw dots/marks on the surface, you can;

- Decrease the flow rate
- Increase the spraying distance
- Increase the spraying pressure
- Expand the pattern
- Increase the line speed

If you couldn't apply enough amount and couldn't obtain a good repellency, you can;

- Increase the flow rate
- Decrease the spraying distance
- Decrease the spraying pressure
- Narrow down the pattern
- Decrease the line speed

Curing

When the coated surface is dry to touch, it can be handled/packed. Fully curing process will continue.

Even if you apply a heat treatment to accelerate the curing process, keep the coated surface away from water/contamination for 24 hours and don't perform harsh tests on it.

## Specifications

| | |
|---|---|
| Packaging | 1-5-30 L |
| Appearance | Colorless Liquid |
| Chemical Resistance | 12>pH>1 |
| Salt Water Resistance | Yes |
| Moisture Resistance | Yes |
| Dry Film Thickness | 75-100 nm |
| Consumption per Unit Area (Manual Application) | 5 $mL/m^2$ |
| Density @23°C | 0.80 $g/cm^3$ |
| pH Value | 1.9-2.2 |
| Transparency | 99% |
| Light Refractive Index | 1.625 (Glass) |
| Application Temperature | 5°C-30°C (≤50% RH) |
| Temperature Durability | 275°C |
| Water Contact Angle | 102° @10 µL |
| Water Contact Angle After "2000" Wet Scrub (ISO-11998:2006) | 96° @10 µL |
| Water Sliding Angle | 28° @60 µL |
| Oil Contact Angle | 72° @10 µL |
| REACH Compliance | Yes |

## Durability

| |
|---|
| Up to 1 year |

## Storage

To achieve a high quality of coating, keep the containers tightly closed in a dry, well ventilated space away from heat and ignition sources, stored at -3°C to +30°C. The shelf life of product is 24 months from the date of production when stored in the unopened container under suggested storage conditions. After opening the

**ARTEKYA TEKNOLOJİ LTD. ŞTİ.**
TUBITAK MAM Serbest Bölge Yeni Teknoloji
Binaları D/Z Gebze / Kocaeli / TURKEY
+90 262 642 81 54
info@artekya.com
www.artekya.com
www.nasiol.com

NASIOL

Technical Data Sheet

C1

container, it is recommended to use up the product within 1 month.

## Removal

Once the product is cured, it is very difficult to remove it from the surface. In such a case, product removal can only be achieved by polishing with a special cutting compound. To avoid any harmful consequences generated due to the surface correction process, read the instructions carefully and watch application videos on Nasiol® web site.

## Disclaimer

The technical information described in this document is based on tests and other practical experience that Nasiol® believes are reliable.

Nasiol® cannot guarantee anything but ready to use quality of the product at the time of shipment, disclaims any liability for product performance and incidental or consequential damages, according to self-implementation within the user's knowledge, beyond the manufacturer's control. Please refer to the Safety Data Sheet (SDS) before use of product.

Users should consult Nasiol® for guidance on the suitability of specific applications. Nasiol® reserves the right to change the given data without further notice.

**ARTEKYA TEKNOLOJİ LTD. ŞTİ.**
TUBITAK MAM Serbest Bölge Yeni Teknoloji
Binaları D/Z Gebze / Kocaeli / TURKEY
+90 262 642 81 54
info@artekya.com
www.artekya.com
www.nasiol.com