

NanoSlic[®] NS 240 Ceramic Anti-Graffiti Coating

INTRODUCTION

NanoSlic NS 240 is a revolutionary hydrophobic and oleophobic coating specifically designed to protect surfaces from graffiti. NS 240 is a permanent ceramic clearcoat that provides outstanding physical and chemical properties. It cures with a non-stick surface that repels all water and solvent-based paints, markers and coatings.

ATTRIBUTES

- Outstanding Repellency to Water/Solvent Based Paints
- Ultra-Thin Coating
- Clear
- Not Affected by UV
- Permanent
- Superior Adhesion and Abrasion Resistance
- Room temp or Oven Curing

TECHNOLOGY

NS 240 is based on revolutionary **NanoSlic** technology. The advanced ceramic chemistry chemically bonds to metal, polymer and coating surfaces while forming a hydrophobic/oleophobic layer at the air interface. NanoSlic 240 is a robust, abrasion and chemically resistant coating suitable for protecting high value assets. The coating repels all water and solvent-based paints, markers and coatings. The ultra-thin coating thickness allows advanced protection with minimal weight.

PRE-CLEAN

Prior to application surfaces should be clean and free of oils and other residues. Be sure that no lint, dust, residual coatings or other contamination remains prior to application of the coating.

APPLICATION

NS 240 can be spray applied; dip coated or wiped on with a lint free cloth, depending on specific design considerations. Coating should be done in a dust free area. In all cases, a consistent thickness and streak free layer should be achieved. NanoSlic 240 will obtain properties in the range of 2-4 microns dry film.

CURING

NanoSlic 240 will dry to tack free in 30 minutes. Do not disturb the coating or re-coat during this

time. The coating will fully cure in 48 hours at room temperature. With this schedule a 9H hardness will be achieved. Curing can be accelerated by drying in an oven with added humidity. Additional data on cure schedules is available. In all cases the coating should not be put into an oven until drying at room temperature for 30 minutes.

Typical accelerated cure schedule is as follows:

1. Application
2. Room temperature dry 30 minutes
3. Oven, 1 hour @ 50-100C and 50-75% RH
 - a. Hardness: 7H
4. Overnight Cure
 - a. Hardness 9H

TEST RESULTS

Physical Properties	Values
Appearance	Clear Gloss
Specific Gravity @ 23°C	1.02 g/cm ³
Viscosity @ 23°C	1.96 cP
Nonvolatile content	28%
Static contact angle, water	105 Degrees
Static contact angle, n-hexadecane	64 Degrees
Abrasion resistance, ASTM D2486, Isopropyl Alcohol	>2000
Pencil Hardness	9H

ENVIRONMENTAL

NanoSlic coating solvents are not classified as VOCs and have been determined not to add to global warming. They use no Perfluorooctanoic acid (PFOA), a toxic substance currently being investigated by the EPA.

