

Smart Nano-Clear

NCI Coating Kit for Lifeboats - TDS



2 Gal Nano-Clear

1 Gal Nano-Clear Degreaser

Applicator Pad

Towel Roll

1 Pack Gloves

Facemasks

Brush

Portable Orbital Sanding Machine

Smart Nano-Clear NCI Coating is the only industrial coating in the global marketplace to dramatically enhance and extend the life of existing Lifeboat gel coat surfaces. Nano-Clear NCI improves gloss, scratch, chemical and long-term UV resistance and reduces cleaning. Nano-Clear NCI Coating penetrates deep into the pores of gel coating paint to enhance gloss, color and fortify the gel coat surface for longterm durability. NCI is a one-component (1K) humidity cured clear coating.

Application Uses :

- Produces highly durable, high-gloss clear coating over in-service painted surfaces including gel coatings, epoxy, polyurethane, powder coatings, concrete, teak wood.

Application Potential :

- Lifeboats, Teak Wood, Painted Structures, Concrete, Cargo Ships.

CONTACT US FOR MORE INFORMATION

Head Office : 7 Soon Lee Street, #03 - 23, Ispace, Singapore, 627608

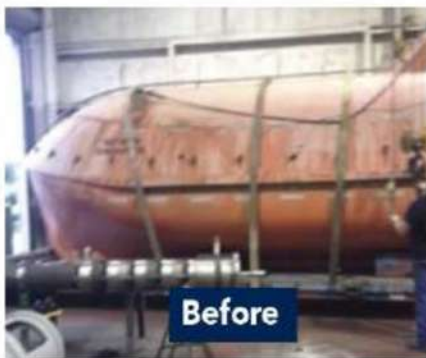
Phone: +65 9066 5337 Email: sales@smartship.com.sg Website: www.smartship.solutions



YOUR PARTNER IN
MARINE SOLUTIONS



- One-component formulation - save on labor and preparation time.
- Designed to be applied directly over two-component coatings.
- Extends in-service life of newly painted or highly oxidized painted surfaces.
- Enhances original color, gloss, surface hardness and UV resistance.
- High scratch resistance (4H pencil hardness).
- Extreme chemical resistance (>1500 MEK rubs).
- Extreme weathering resistance (98-100% gloss retention).



NANO-CLEAR APPLICATION CONDITIONS

Temperature: 40°F (4°C) to 100°F (38°C)
Relative Humidity: 40% to 95%

PHYSICAL PROPERTIES

Polymer Chemistry: Nanostructured Polyurethane Hybrid

Mixing Ratio: No mixing required

Recommended Dry Film Thickness: 2 mil (50 µm)

Recommended Wet Film Thickness: 6 mil

Pencil Hardness - ASTM D3363: 4H

Pendulum Hardness (Persoz) - ASTM D4366: 220

Abrasion Resistance - ASTM D4060: 8.4 mg loss

Impact Strength - ASTM D2794: > 140

Water Immersion Test - ISO 2812-2: Pass

QUV Resistance - ASTM D4587: 99%

Xenon WOM - ASTM G155: 99%

MEK Resistance - ASTM D4752: >1500

Salt Spray - ASTM B-117: 6000 hrs. no rust, no blisters

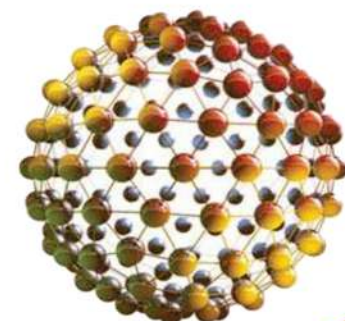
DMA – Crosslink Density - (X103 mol/m³): 2.17

VOC (as received): 1.05 lbs. / gal.

Viscosity: 200 cps



NANO-CLEAR 3D POLYMER



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APPLICATION INFORMATION

Consult SDS for proper handling, cleanup, disposal, and use of personal protective equipment. Circulate sufficient air to maintain working environment below the PEL and LEL. Apply according to local, state, and federal (OSHA) regulations.

SURFACE PREPARATION

Cured Paint or In-Service Painted Surfaces:

- Repair any structural damage (rust or chipping).
- **Sand** the lifeboat gel coating with 400 grit orbital sander, then solvent clean.
- Water rinse the lifeboat to remove surface contaminants, then dry thoroughly.
- Pour **Nano SuperClean Degreaser** in bucket and use scrub brush to deep clean lifeboat.
- **Scrub** contaminants off the lifeboat using a scrub brush, then water rinse & dry.
- Surface is ready for Nano-Clear NCI to be applied using the provided applicator pad.



WET-ON-WET SPRAY APPLICATION

- Pour an adequate amount of Nano-Clear NCI within the provided **Paint Tray**.
- Dip the provided **Applicator Pad** within the paint tray until saturated, then wipe-off excess NCI.
- Apply **2 wet uniform wet coats with 2 - 3 min.** between wet coats to allow for solvent evaporation.
- Apply NCI until a high-gloss finish appears, Low gloss means that you need to apply another wet coat.
- Avoid recoating additional coats after 10 min. as flow and leveling will be negatively effected.
- Recommended (Wet Film Thickness WFT): 3 mil per each wet coat (6 mil wet film build total).
- Recommended (Dry Film Thickness DFT): 2.00 to 2.50 mil depending on surface properties desired.



The number of wet coats required should be determined by the overall gloss level 5 min. after application:

* High gloss = Good film build

* Low Gloss = Low film build (*recommend applying another wet coat to increase gloss and improve properties*).

Solvent Flash: Allow 2 to 3 min. between wet coats at 72°F (22°C) to allow for solvent evaporation.

THINNING

- No thinner is required as Nano-Clear has very low viscosity.

EQUIPMENT CLEAN-UP

- Clean the Pump Sprayer immediately after using **Acetone or MEK solvent**. Never clean spray equipment with water or alcohol.

CURE TIME @ 72°F (22°C), 50% R.H.

Dust free:	~ 20-30 minutes
Tack free:	~ 30-40 minutes
Handle:	~ 4 hours
Dry Hard:	24 hours @ 72°F (22°C)
Full Cure:	48 hours @ 72°F (22°C)

CURE TIME @ 90°F (32°C), 50% R.H.

Dust free:	~ 10-15 minutes
Tack free:	~ 20-30 minutes
Handle:	~ 3 hours
Dry Hard:	24 hours @ 90°F (32°C)
Full Cure:	48 hours @ 90°F (32°C)

* Lower temperatures and lower humidity conditions will slow-down the curing rate.

* Higher temperatures and higher humidity conditions will speed-up the curing rate.

SURFACE COVERAGE PER GALLON

300 ft² / gal @ 2.00 mil DFT or 31 m² / 3.8L @ 2.00 mil DFT (3 wet coats @ 2.00 mils each wet coat = 6.00 mil wet total).

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WEIGHT PER GALLON:

8.0 lbs (3.63 kg)

SHIPPING WEIGHT

30 lbs or 13.6 kg

TRANSPORTATION, STORAGE & SHELF-LIFE

Transportation: Min. 40°F (4°C) and Max. 86°F (30°C) for short periods.

Storage & Shelf-Life: Un-opened Container:

40°F (4°C) Minimum: 12 month

72°F (22°C) Max: 12 month

80°F (27°C) Max: 6 month

90°F (38°C) Max: 2 month

Storage & Shelf-Life: Opened* Container:

80°F (27°C) Max: 2 months

*Opened is defined as cap is opened-and-closed immediately after pouring contents to avoid solvent evaporation / contamination.



SAFETY INSTRUCTIONS

Consult Nano-Clear NCI Safety Data Sheet prior to use.

The Super Nano-Clear NCI for Lifeboats Kit Includes:

- 2 - Gallon of Nano-Clear NCI Clear Coating for Lifeboats
- 1 - Gallon of Nano-Clear SuperClean Degreaser (use full strength)
- 1 - Applicator Pad 9" with Holder and 4 x Refiller - 2 x Paint Tray
- 1 - Scott Shop Towel Roll
- 1 - Pack of 10 Latex Rubber Gloves
- 1 - Pack of N95 Facemasks
- 1 - Scrub Brush
- 1 - Set of Portable Orbital Sanding Machine
- 1- 80 Pieces of 400 Grit Sandpaper



SURFACE MAINTENANCE / CLEANING

- Use low pH soap and water for clean-up.
- Use lint-free microfiber cloths to clean and dry surfaces.
- Use paint thinner to remove graffiti.

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