



**In Union,
there is strength.**



UNITHANE IC-352 NF

Revision Date: 01/25

Reviewed: 01/06/2025

RECOMMENDED FOR USE WITH:
Paint and Coating Resins, Graphic Arts

UNITHANE IC-352 NF is a NMP free, uniquely hard, high gloss, APEO free, water based polyurethane dispersion, with fast drying and high chemical resistance properties. UNITHANE IC-352 NF has been specifically designed for use in a formulated topcoat for wood, metal, concrete, flooring, graphic arts, paint, textiles and selected plastics.

SPECIAL FEATURES

NMP-Free (NF)

APPLICATION TYPES

Interior, Exterior, Synthetic Leather, Flooring, Wood, Concrete, Paint, Metal, Graphic Arts, OPV, Paper, Textiles, Plastics - Flexible, Plastics - Rigid

TYPICAL SPECIFICATIONS

TOTAL SOLIDS: 34 - 36

pH: 8.5 - 10.5

VISCOSITY @ 25 DEGREES C: 10 - 500 cps

VOC (GRAMS/LITER): 111 - 113

VOC (% OF TOTAL WEIGHT): 10.5 - 11.5

SPECIFIC GRAVITY: 1.03 - 1.06

APPEARANCE: Semi-Translucent

GLOSS @60°: 80 - 100

FREEZE/THAW CYCLES D2243: 0

SHELF LIFE: Maximum 12 months

HARMONIZE TARIFF NUMBER: 3909.50.6000

CHEMICAL RESISTANCE TESTING (D-1308)

*note: 5= no damage, films dried for 15 minutes at 80°C,
then equalized at room temp for 7 days*

WATER: 5

ACETIC ACID: 5

AMMONIA: 5

METHYL ETHYL KETONE: 5

2-PROPANOL: 5

TOLUENE: 5

GASOLINE: 5

TYPICAL FILM PROPERTIES

FILM APPEARANCE AFTER CURING: Clear

TENSILE (D-882): 6200 psi

TENSILE AT 100% ELONGATION: 2450 psi

ELONGATION (D-882): 420%

COLD CRACK (ISO 17233): < -30°C

SOFTENING POINT: 210°C

PENCIL HARDNESS (D-3363): 2B

SWARD HARDNESS (D-2134): 32

UV RESISTANCE (D-4587): No Damage (1000 hours at 340 nm)

IMPACT RESISTANCE (D-2794): No Damage at 160 psi (Direct
or Reverse)

TABOR ABRASION (D-4060): 11mg loss (CS-10, 1000g, 1000
cycles)

MANDREL BEND (D522): Pass 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 1

DRY TIME (D-5895): 60 minutes

HYDROLYSIS RESISTANCE (200 HOURS, 70°C, 95% RH): Retained
80% of Tensile Properties

VARIOUS SUBSTRATE CROSS-CUT ADHESION (D-3359)

COLD ROLL STEEL - UNPOLISHED: 5B

ALUMINUM - UNTREATED: 5B

BRASS - UNTREATED: 5B

ABS - UNTREATED: 0B

POLYCARBONATE - UNTREATED: 0B

NYLON - UNTREATED: 0B

HDPE - UNTREATED: 0B

Certified to ISO-9001: 2015

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