



**In Union,
there is strength.**



UNITHANE IC-807 SF

Revision Date: 03/19

RECOMMENDED FOR USE WITH:

Paint and Coating Resins, Graphic Arts, Flexible Substrates

UNITHANE IC-807 SF is a solvent free, medium soft, high gloss, APEO free, waterbased polyurethane dispersion; with excellent additive compatibility and flexibility properties. Developed for use in a formulated coating for graphic arts, concrete, paint, textiles and selected plastics.

SPECIAL FEATURES

Solvent Free (SF), NMP-Free (NF), Low VOC (<100 g/L)

APPLICATION TYPES

Interior, Exterior, Automotive, Aircraft, Synthetic Leather, Flooring, Wood, Paint, Graphic Arts, Inks, OPV, Paper, Textiles, Plastics - Flexible, Plastics - Rigid, Adhesive/Primer

TYPICAL SPECIFICATIONS

TOTAL SOLIDS: 34 - 36

pH: 7.5 - 9.5

VISCOSITY @ 25 DEGREES C: 10 - 500 cps

VOC (GRAMS/LITER): 2.0

VOC (% OF TOTAL WEIGHT): 0.20

SPECIFIC GRAVITY: 1.04

APPEARANCE: Opaque

GLOSS @ 60°: 70 - 100

FREEZE/THAW CYCLES D2243: 3 cycles

SHELF LIFE: Maximum 12 months

HARMONIZE TARIFF NUMBER: 3909.50.6000

TYPICAL FILM PROPERTIES

FILM APPEARANCE AFTER CURING: Clear

TENSILE (D-882): 3400 psi

TENSILE AT 100% ELONGATION: 1200 psi

ELONGATION (D-882): 480%

COLD CRACK (ISO 17233): below -30°C

SOFTENING POINT: 135°C

PENCIL HARDNESS (D-3363): 4B

SWARD HARDNESS (D-2134): 6

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): 10 mg 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): 75 minutes

HYDROLYSIS RESISTANCE (200 HOURS, 70°C, 95% RH): Retained 65% of Tensile Properties

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: 3

METHYL ETHYL KETONE: 4

2-PROPANOL: 2

TOLUENE: 5

GASOLINE: 5

VARIOUS SUBSTRATE CROSS-CUT ADHESION (D-3359)

COLD ROLL STEEL - UNPOLISHED: 5B

ALUMINUM - UNTREATED: 5B

BRASS - UNTREATED: 5B

ABS - UNTREATED: 5B

POLYCARBONATE - UNTREATED: 5B

NYLON - UNTREATED: 5B

HDPE - UNTREATED: 0B

Certified to ISO-9001: 2015

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