



**In Union,
there is strength.**



UNITHANE IC-850 NF

Revision Date: 06/21

Reviewed: 06/21/21

RECOMMENDED FOR USE WITH:

Automotive Interiors - Non-Leather, Paint and Coating Resins, Graphic Arts, Flexible Substrates, Adhesives

Unithane IC-850 NF is a NMP free, uniquely soft, low VOC, medium gloss, APEO free, waterbased polyurethane dispersion; requiring soft feel, flexibility and automotive grade properties. Specifically designed for use in a formulated coating for graphic arts, metal, paint, textiles and selected plastics.

SPECIAL FEATURES

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

APPLICATION TYPES

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

TYPICAL SPECIFICATIONS

TOTAL SOLIDS: 34 - 36

pH: 8.0 - 10.0

VISCOSITY @ 25 DEGREES C: 10-200

VOC (GRAMS/LITER): 80-90

VOC (% OF TOTAL WEIGHT): 8.0-9.0

SPECIFIC GRAVITY: 1.01-1.04

APPEARANCE: Opaque

GLOSS @ 60°: 70-100

FREEZE/THAW CYCLES D2243: 0

SHELF LIFE: Maximum 12 months

HARMONIZE TARIFF NUMBER: 3909.50.6000

*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: 4

METHYL ETHYL KETONE: 2

2-PROPANOL: 1

TOLUENE: 3

GASOLINE: 5

TYPICAL FILM PROPERTIES

FILM APPEARANCE AFTER CURING: Clear

TENSILE (D-882): 3600 psi

TENSILE AT 100% ELONGATION: 1100 psi

ELONGATION (D-882): 700%

COLD CRACK (ISO 17233): <-30°C

SOFTENING POINT: 170°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): 13 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): 95 minutes

HYDROLYSIS RESISTANCE (200 HOURS, 70°C, 95% RH): Retained
90% of Tensile Properties

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

Union Specialties, Inc. 3 Malcolm Hoyt Drive, Newburyport, Massachusetts USA

Phone: 978-465-1717 Fax: 978-465-4194 email: union@unionspecialtiesinc.com www.UnionSpecialtiesInc.com

Copyright © 2013-2014 Union Specialties, Inc. All rights reserved, all pages.

Disclaimer: The information and data contained herein are believed to be correct. However, we do not warrant either expressly or by implication the accuracy thereof.