Devthane® 379N

Aliphatic Polyurethane

PRODUCT DESCRIPTION

A low VOC, two component modified acrylic polyurethane finish giving excellent durability and long-term recoatability, for use over correctly prepared primed surfaces. This product is also HAPS free and exempt solvent free.

INTENDED USES

For use on properly prepared and primed steel, concrete or steel floors, masonry, drywall, plaster, metal, concrete block, galvanized, aluminum, poured concrete and glazed brick. Ideal for use on exterior or interior structural steel, piping, metal buildings, control cabinetry, conveyors, pumps, storage tank exteriors, motors, machinery, and transportation vehicles.

Can also be used in the hard service areas of food processing plants, dairies, schools, restaurants, hospitals, correctional facilities, factories, stadiums, arenas, and amusement parks.

PRACTICAL INFORMATION FOR DEVTHANE 379N

Color	White, custom and ready-mix colors
Gloss Level	Gloss
Volume Solids	71% ± 3% (depends on color)
Typical Thickness	2-3 mils (50-76 microns) dry equivalent to 2.8-4.3 mils (70-107 microns) wet
Theoretical Coverage	569 sq.ft/US gallon at 2 mils d.f.t and stated volume solids 14.20 m²/liter at 50 microns d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless spray, Air spray, Brush, Roller

Drying Time

			Overcoating Interval with recommended topcoats	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
50°F (10°C)	7.5 hours	14 hours	14 hours	Extended[1]
59°F (15°C)	5 hours	8 hours	8 hours	Extended[1]
77°F (25°C)	2.5 hours	4 hours	4 hours	Extended[1]
104°F (40°C)	45 minutes	90 minutes	2 hours	Extended[1]

[1] See International Protective Coatings Definitions & Abbreviations

REGULATORY DATA

Flash Point (Typical)	Part A 97°F (36°C); Part B 212°F (100°C); Mixed 97°F (36°C)	
Product Weight	11.5 lb/gal (1.38 kg/l)	
VOC	2.01 lb/gal (241 g/lt)	EPA Method 24

See Product Characteristics section for further details

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SURFACE PREPARATION

Surfaces must be dry, clean, free of oil, grease, form release agents, curing compounds, laitance, other foreign matter and be structurally sound. Remove all loose paint, mortar spatter, mill scale, and rust. To ensure optimum appearance, any primer or undercoat should be smooth and free of any surface defects such as runs, dry spray or heavy orange peel.

New Surfaces:

Steel
Apply over surfaces which have been suitably prepared and primed. Consult the relevant primer datasheet for advice on surface preparation requirements. Prime using: Bar-Rust 231, Bar-Rust 233H or Bar-Rust 235.

Galvanized Steel and Aluminum
Remove dirt, grease, oil or other surface contamination by solvent cleaning or with Devprep 88 cleaner or other suitable cleaner, followed by a thorough water rinsing. Prime using: Devran 201H or Devran 203.

Concrete Block
Remove loose aggregate and repair major voids. Fill with: Bar-Rust 231, Bar-Rust 235, Bar-Rust 233H, thinned 25% with recommended thinner, or Tru-Glaze-WB 4015.

Concrete Floors, Poured Concrete
Cure at least 30 days. pH must be 10.0 or lower before painting. Acid etch or abrasive blast slick, glazed concrete or concrete with laitance. Prime using: Bar-Rust 231, Bar-Rust 233H, Bar-Rust 235, Tru-Glaze-WB 4030 or Pre-Prime 167.

Drywall:
Prime with a premium acrylic latex vapor barrier primer sealer.

Previously Painted Surfaces:
Poorly adhering old coatings should be removed. Wash to remove contaminants. Rinse thoroughly with water and allow to dry. Dull glossy areas by light sanding. Remove all debris. Prime bare areas with primer specified under New Surfaces.

Fiberglass
Solvent wipe, scuff sand and solvent wipe again. Prime with Devran 201H epoxy.

APPLICATION

Mixing

Material is supplied in two containers as a unit. Always mix a complete unit in the proportions supplied. Once the unit has been mixed, it must be used within the working pot life specified.
(1) Agitate Base (Part A) with a power agitator.
(2) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator.

Mix Ratio

4 part(s):1 part(s) by volume

Working Pot Life

50°F (10°C)	59°F (15°C)	77°F (25°C)	104°F (40°C)
6 hours	4 hours	3 hours	60 minutes

Airless Spray

Recommended

Tip Range 13-17 thou (0.33-0.43 mm)
Total output fluid pressure at spray tip not less than 2204 psi (155 kg/cm²)

Air Spray (Conventional)

Recommended

See Product Characteristics section for further details

Brush

Suitable

Roller

Suitable

Thinner

International GTA056 / T-9 Thinner for spray application
T-17 Thinner for brush application

Use of GTA056 will add small amounts of VOC and HAPS (Hazardous Air Polluting Solvents). Do not thin more than allowed by local environmental legislation

Cleaner

International GTA056 / T-9 Thinner

Work Stoppages

Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA056/T-9 Thinner. Once units of paint have been mixed they should not be resealed and it is advised that after prolonged stoppages work recommences with freshly mixed units.

Clean Up

Clean all equipment immediately after use with International GTA056/T-9 Thinner. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency of cleaning will depend upon amount sprayed, temperature and elapsed time, including any delays. All surplus material and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

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PRODUCT CHARACTERISTICS

Advantages:

- Excellent gloss and color retention
- Excellent abrasion and chemical resistance
- Easily applied by brush, roller or spray
- Wide color selection
- Excellent resistance to marring, chipping, and scratching
- Contains ultraviolet light absorber

Thinning is not normally required. However, depending on local VOC and air quality regulations, small amounts (5% or less) of GTA056/T-9 Thinner may be added. Small amounts (5% or less) of T-17 Thinner may improve roller, brush or spray application. If local VOC and/or air quality regulations are not an issue, and depending on the individual set-up of the spray equipment, additional thinning may be allowed to obtain the desired individual finish.

Maximum continuous dry temperature resistance for Devthane 379N is 250°F (121ºC).

Devthane 379N reacts with atmospheric moisture, and as such when in the can should remain covered at all times. Failure to keep tin covered will result in skinning of unused material and loss of pot life.

Devthane 379N may be tinted with industrial colorants; contact International Paint for further information. Add colorants only to the base portion and mix thoroughly before adding the converter portion.

For airless spray application: Ideally, fluid hoses should not be less than 3/8" ID and not longer than 50 feet to obtain optimum results. Longer hose length may require an increase in pump capacity, pressure, and/or thinning.

For air spray application: Use a professional grade conventional gun with a 0.070" (1.78mm) fluid tip or larger. Adjust fluid and air pressure to achieve a good spray pattern.
Care should be taken that proper and uniform film thicknesses are obtained. Brushing and rolling may require multiple coats to achieve correct film thickness and/or hiding.

Note: VOC values are typical and are provided for guidance purpose only. These may be subject to variation depending on factors such as differences in color and normal manufacturing tolerances.

SYSTEMS COMPATIBILITY

The following primers are recommended for Devthane 379N:

Bar-Rust 231	Bar-Rust 235
Cathacoat 302H	Cathacoat 302HB
Cathacoat 302V	Cathacoat 313
Devran 201H	Devran 203
Devran 261QC	

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ADDITIONAL INFORMATION

Further information regarding industry standards, terms and abbreviations used in this data sheet can be found in the following documents available at www.international-pc.com:

- Definitions & Abbreviations
- Surface Preparation
- Paint Application
- Theoretical & Practical Coverage

Individual copies of these information sections are available upon request.

SAFETY PRECAUTIONS

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given on this sheet, the Material Safety Data Sheet and the container(s), and should not be used without reference to the Material Safety Data Sheet (MSDS) which International Protective Coatings has provided to its customers.

All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards and regulations.

In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation.

If in doubt regarding the suitability of use of this product, consult International Protective Coatings for further advice.

PACK SIZE

Unit Size	Part A		Part B	
	Vol	Pack	Vol	Pack
5 US gal	4 US gal	5 US gal	1 US gal	1 US gal
1 US gal	0.8 US gal	1 US gal	0.2 US gal	0.25 US gal

For availability of other pack sizes contact International Protective Coatings

SHIPPING WEIGHT (TYPICAL)

Unit Size	Part A	Part B
5 US gal	51.4 lb	10.5 lb
1 US gal	10.4 lb	2.3 lb

STORAGE

Shelf Life: 24 months at 77°F (25°C). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.

Disclaimer