

Low VOC Polyurethane Finish

PRODUCT DESCRIPTION A two pack, low VOC polyurethane finish. Outstanding resistance to severe weathering. High gloss. Good abrasion, chemical and solvent resistance.

INTENDED USES A cosmetic finish for above water areas.
For use at Newbuilding, Maintenance & Repair or On Board Maintenance.

PRODUCT INFORMATION

Colour	99002-Black, 99010-White and a range of colours
Finish/Sheen	High Gloss
Part B (Curing Agent)	990B
Volume Solids	68% ±3% (ASTM D2697-86)
Mix Ratio	9 volume(s) Part A to 1 volume(s) Part B
Typical Film Thickness	50 microns dry (74 microns wet), 50 - 75 microns dry practical range equivalent to 74 - 110 microns wet
Theoretical Coverage	13.60 m ² /litre at 50 microns dft, allow appropriate loss factors
Method of Application	Airless Spray, Brush, Conventional Spray, Roller
Flash Point (Typical)	Part A 38°C; Part B 57°C; Mixed 39°C (Setaflash) (ASTM D-3278)
Induction Period	None required

Drying Information	5°C	10°C	25°C	30°C
Touch Dry [ASTM D1640 7.5.1]	3.5 hrs	3 hrs	2 hrs	75 mins
Hard Dry [ASTM D1640 7.7]	24 hrs	17 hrs	6 hrs	3 hrs
Pot Life	7 hrs	5.5 hrs	3 hrs	2 hrs

Overcoating Data - see limitations	Substrate Temperature							
	5°C		10°C		25°C		30°C	
Overcoated By	Min	Max	Min	Max	Min	Max	Min	Max
Interthane 990HS	24 hrs	ext	17 hrs	ext	6 hrs	ext	3 hrs	ext

Note Recoat limits are defined as 990HS, at specified temperatures within a relative humidity range of 40-60%. For surface temperatures in excess of 32°C, see "Limitations" section.

REGULATORY DATA **VOC** 327 g/lit as supplied (EPA Method 24)

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

MIL SPEC MIL-PRF-24667B, Type I, II, III & VIII Composition G
MIL-PRF-24667B, Type I & VII, Composition L
For colour marking purposes only

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SYSTEMS AND COMPATIBILITY

Consult your International Paint representative for the system best suited for the surfaces to be protected.

SURFACE PREPARATIONS

Paint only clean, dry surfaces. Remove all grease, oil, soluble contaminants and other foreign matter by "solvent cleaning" (SSPC-SP1).

Unpainted surfaces:

Prepare surface and apply recommended primer. Apply one or more coats of Interthane 990HS as specified. (Consult the relevant primer data sheet for surface preparation and overcoating information.)

Previously Painted Surfaces

Remove all mill scale, loose rust, loose paint and other foreign matter by "Hand or Power Tool Cleaning" (SSPC-SP2 or SP3, respectively).

Sand or 'Brush Blast' (SSPC-SP7) any hard glossy areas until dull. Spot prime bare areas as recommended and apply one or more coats of Interthane 990HS as specified. Consult the relevant primer data sheet for specific surface preparation and overcoating information. Check integrity of existing coating system and apply a representative test patch to confirm compatibility. Consult your International Paint representative for procedures.

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APPLICATION	Apply by brush, roller or spray. Apply at 73 microns wet which will give 50 microns dry film thickness, as specified. Consult the following equipment recommendations or utilize suitable equal.
Tinting	Range of colours available from Chromascan. Most colours require that containers be slightly short filled to accommodate the addition of colourant. Actual coverage will depend upon amount of colourant added and should be taken into consideration when ordering. A limited number of Interthane 990HS tinted colours may require more than one coat for complete hiding.
Mixing	Material is supplied in 2 containers as a unit. Always mix a complete unit in the proportions supplied. (1) Agitate Part A with a power agitator, (2) Combine entire contents of Part A and B and mix thoroughly with a power agitator.
Thinner	DO NOT THIN BEYOND YOUR STATE'S COMPLIANCY. Maximum thinning for VOC compliance is colour specific. Contact your International Paint representative for thinning and VOC information.
Airless Spray	Minimum 30:1 ratio pump; 0.013"-0.019" (331-483 microns) orifice tip; 3/8" (9.5mm) ID high pressure material hose; 60 mesh tip filter.
Conventional Spray	DeVilbiss MBC-510 gun E tip and 704 air cap; 3/8" (9.5 mm) ID material hose; double regulated pressure tank with oil and moisture separator.
Brush	Use appropriate size China bristle brush.
Roller	Use All Purpose Roller cover with 3/8" (9.5 mm) smooth to medium nap. Prewash roller cover to remove loose fibres prior to use.
Work Stoppages and Cleanup	Clean all equipment immediately after use with International GTA056. Spray equipment requires flushing with this solvent. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency will depend upon factors such as amount sprayed, temperature and elapsed time including work stoppages. Monitor material condition. Do not exceed pot life limitations. All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.
Welding	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. In North America do so in accordance with instruction in ANSI/ASC Z49.1 "Safety in Welding and Cutting."

SAFETY

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.

Prior to use, obtain, consult and follow the Material Safety Data Sheet for this product concerning health and safety information. Read and follow all precautionary notices on the Material Safety Data Sheet and container labels. If you do not fully understand these warnings and instructions or if you can not strictly comply with them, do not use this product. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapour concentrations within safe limits and to protect against toxic or oxygen deficient hazards. Take precautions to avoid skin and eye contact (ie. gloves, goggles, face masks, barrier creams etc.) Actual safety measures are dependant on application methods and work environment.

EMERGENCY CONTACT NUMBERS:

USA/Canada - Medical Advisory Number 1-800-854-6813

Europe - Contact (44) 191 4696111. For advice to Doctors & Hospitals only contact (44) 207 6359191

R.O.W. - Contact Regional Office

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LIMITATIONS

Apply in good weather when air and surface temperatures are above 2°C. Surface temperature must be at least 3°C above dew point. For optimum application properties, bring material to 21-27°C prior to mixing and application. Unmixed material (in closed containers) should be maintained in protected storage between 4-38°C. Film thickness above 100 microns and below microns DFT may adversely effect appearance and performance. If surface temperatures exceed 32°C, then after 72 hours clean with GMA571 biodegradable cleaner prior to overcoating. For recoat beyond 30 days at any surface temperature additional surface preparation may be required.

Dry Temperature Resistance 93°C.

Overcoating information is given for guidance only and is subject to regional variation depending upon local climate and environmental conditions. Consult your local International Paint representative for specific recommendations. Technical and application data herein is for the purpose of establishing a general guideline of the coating and proper coating application guidelines. Test performance results were obtained in a controlled laboratory environment and International Paint makes no claim that the exhibited published test results, or any other tests, accurately represent results actually found in all field environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection, verification of performance and use of the coating.

TINT BASE AVAILABILITY

99011A - Light, 99044A - Ultra Deep, 99066A - Red, 99033A - Deep and 99055A - Yellow.

UNIT SIZE

Unit Size	Part A		Part B	
	Vol	Pack	Vol	Pack
1 US gal	1 US gal	1 US gal	1 US pint	1 US pint
5 US gal	5 US gal	5 US gal	0.5 US gal	0.5 US gal

Note : US containers are short filled
For availability of other unit sizes consult International Paint

UNIT SHIPPING WEIGHT (TYPICAL)

Unit Size	Unit Weight
1 US gal	12.25 lb
5 US gal	60.7 lb

STORAGE

Shelf Life 24 months from date of manufacture when maintained in protected storage at 4-38°C. Subject to reinspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.

WORLDWIDE AVAILABILITY Consult International Paint.

IMPORTANT NOTE

The information in this data sheet is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at their own risk. All advice given or statements made about the product (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to the maximum extent permitted by law) any loss or damage arising out of the use of the product. We hereby disclaim any warranties or representations, express or implied, by operation of law or otherwise, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local representative that this data sheet is current prior to using the product.

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