

### Series 740 & 750 Endura-Shield UVX

Polyurethanes were once the industry's top performing exterior finish. In recent years they have become the norm. As construction and maintenance costs have escalated, the need for a cost-effective solution to extended performance has increased. Themec Series 740 & 750 Endura-Shield UVX strengthens the product line in three ways.

First, restrictions of VOC's have limited the use of solvent-based polyurethane in serveral key markets. Many low-VOC and waterbased polyurethane technologies are extremely sensitive to environmental conditions and application methods. Endura-Shield UVX addresses the need to meet VOC limits of 100 grams/litre while maintaining working properties comparable to traditional solvent-based polyurethanes.

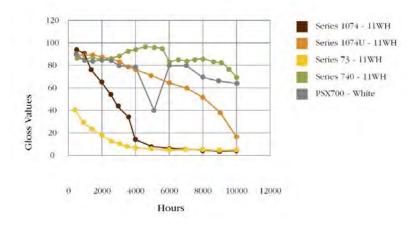
Second, in recent years polysiloxane products have become common for exterior applications. Because polysiloane technology has proven to have inconsistant performance in the field, Tnemec felt a polyfunctional aliphatic urethane was a much more reliable technology. Tnemec created a product with superior performance, better working properties, and a comparable material price.

Finally, Series 740 and 750 Endura-Shield UVX fill the need of an affordable upgrade from the standard polyurethane products. It is appropriate to position it as a compromise between the exceptional performance of fluorourethane and the affordability of polyurethane. It is the "Better" in the "Good, Better Best" offering of Series (73, 1074/1075), Series (740/750), Series (700, 701, 1070, 1071).

#### **BENEFITS**

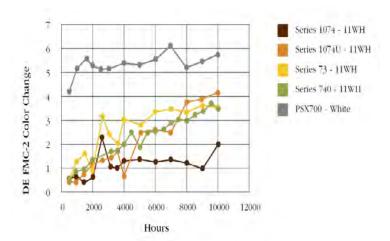
- Best color and gloss retention of any urethane tested
  - Superior or equal to polysiloxanes
    - Less than 100 g/l
    - High-build capability
    - Tough, durable film
  - Series 44-712 accelerator available

#### **Gloss Retention**



Tnemec Company Independently Represented by Mid-Atlantic Coatings 343 North Charles Street, Suite 200, Baltimore, MD 21201 Tel: 410-234-3600 Fax: 410-539-1564 Cell: 410-409-2100 Email: todd.guntner@matlanticcoatings.com

## **Color Change**



Series 740 Endura-Shield UVX 8000 hours

### Competitors Standard Polyurethane 1500 hours





## **ENDURA-SHIELD® UVX SERIES 740**

To Recoat

#### PRODUCT PROFILE

**GENERIC DESCRIPTION** Polyfunctional Aliphatic Urethane

An advanced technology polyurethane finish coat combining low VOC with exceptional performance. Offers superior color and gloss retention for long-term aesthetics on a wide range of exterior structures. Durable film stands up to COMMON USAGE

abrasion and exterior weathering. Very good brush, roll and spray application characteristics. NOT FOR IMMERSION

COLORS Refer to Tnemec Color Guide. Note: Certain colors may require multiple coats depending on method of application and

finish coat color. When feasible, the preceding coat should be in the same color family (blue, gray, etc.), but noticeably

FINISH Gloss

#### **COATING SYSTEM**

**Steel:** Series 1, 27, 66, L69, L69F, N69, N69F, V69, V69F, 90G-1K97, 90-97, H90-97, 91-H<sub>2</sub>O, 94-H<sub>2</sub>O, 135, L140, L140F, N140, N140F, V140, V140F, 161, 394 **PRIMERS** 

**Concrete:** Series 1, 27, 66, L69, L69F, N69, N69F, V69, V69F, 161

Note: Any of the above listed primers exterior exposed more than 30 days must first be scarified or reprimed with

themselves. Brush blasting with fine abrasive is the preferred method of scarification.

Series 700, 701, 1070, 1070V, 1071, 1071V, 1072, 1072V, 1077, 1078 **TOPCOATS** 

Note: When topcoating Series 740 with itself, or any of the above listed topcoats, the maximum recoat time is 45 days.

#### **SURFACE PREPARATION**

**ALL SURFACES** Must be clean, dry and free of oil, grease and other contaminants. See primer product data sheet for surface preparation

#### TECHNICAL DATA

**VOLUME SOLIDS**  $73.0 \pm 2.0\%$  (mixed) †

**CURING TIME** 

**PACKAGING** 

2.5 to 5.0 mils (65 to 125 microns) per coat. **Note:** Number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative. RECOMMENDED DFT

To Touch

Temperature

75°F (24°C) 2 hours 6-8 hours Curing time varies with surface temperature, air movement, humidity and film thickness. Note: For faster time-to-moisture resistance and low-temperature applications, add No. 44-712 Urethane Accelerator; see separate product data sheet.

To Handle

**VOLATILE ORGANIC COMPOUNDS** 

Unthinned: 0.83 lbs/gallon (99 grams/litre)
Thinned 10% (Max) (No. 68 Thinner): 0.83 lbs/gallon (99 grams/litre)
Thinned 5% (Max) (No. 42 Thinner): 1.16 lbs/gallon (139 grams/litre) Thinned 5% (Max) (No. 49 Thinner): 0.83 lbs/gallon (99 grams/litre) †

HAPS

Unthinned: 0 lbs/gal solids Thinned 10% (Max) (No. 68 Thinner): 0 lbs/gal solids Thinned 5% (Max) (No. 42 Thinner): 0 lbs/gal solids Thinned 5% (Max) (No. 49 Thinner): 0 lbs/gal solids

THEORETICAL COVERAGE 1,171 mil sq ft/gal (28.7 m²/L at 25 microns). † NUMBER OF COMPONENTS

Two: Part A and Part B

MIXING RATIO By volume: Four (Part A) to one (Part B)

> PART A (Partially filled) PART B (Partially filled) When Mixed 3 gallons (11.3L) Large Kit 5 gallon pail 1 gallon can 1 gallon (3.79L) Small Kit 1 gallon pail 1 quart can

NET WEIGHT PER GALLON  $12.27 \pm 0.25$  lbs  $(5.57 \pm .11 \text{ kg})$  †

STORAGE TEMPERATURE Minimum 20°F (-7°C) Maximum 110°F (43°C)

TEMPERATURE RESISTANCE (Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)

SHELF LIFE 12 months at recommended storage temperature. FLASH POINT - SETA Part A: 102°F (39°C) Part B: 109°F (43°C)

**HEALTH & SAFETY** Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Material

Safety Data Sheet for important health and safety information prior to the use of this product.

Keep out of the reach of children.

## ENDURA-SHIELD® UVX | SERIES 740

#### APPLICATION

#### **COVERAGE RATES**

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m²/Gal)
Suggested	4.0 (100)	5.5 (140)	293 (27.2)
Minimum	2.5 (65)	3.5 (90)	468 (43.5)
Maximum	5.0 (125)	7.0 (180)	234 (21.8)

Allow for overspray and surface irregularities. Film thickness is rounded to the nearest 0.5 mil or 5 microns. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating

MIXING

Stir contents of the container marked Part A, making sure no pigment remains on the bottom. Add the contents of the can marked Part B to Part A while under agitation. Continue agitation until the two components are thoroughly mixed. Do not use mixed material beyond pot life limits. Caution: Part B is moisture-sensitive and will react with atmospheric moisture. Keep unused material tightly closed at all times.

THINNING

For air spray, thin up to 10% or 1/2 pint (380 mL) per gallon with No. 68 Thinner. For airless spray, thin up to 5% or 1/4 pint (190 mL) per gallon with No. 68 Thinner. For brush or roller, thin up to 5% or 1/4 pint (190 mL) per gallon with No. 49 Thinner. Note: No. 42 Thinner may be used to thin for brush and roller if temperatures are not expected to exceed 80°F (27°C). Thinning is required for proper brush or roller application. **Caution: Do not add thinner if more than thirty** (30) minutes have elapsed after mixing.

POT LIFF

1 hour at 75°F (24°C)

#### APPLICATION EQUIPMENT

#### Air Spray

Gu	n	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbis	ss JGA	Е	765 or 704	5/16" or 3/8" (7.9 or 9.5 mm)	3/8" or 1/2" (9.5 or 12.7 mm)	50-65 psi (3.4-4.5 bar)	10-20 psi (0.7-1.4 bar)

Low temperatures or longer hoses require higher pot pressure.

#### Airless Spray

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.015"-0.017"	4000-4500 psi	1/4" or 3/8"	60 mesh
(380-430 microns)	(275-310 bar)	(6.4 or 9.5 mm)	(250 microns)

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions.

**Roller** Use 1/4" or 3/8" (6.4 mm or 9.5 mm) synthetic woven nap roller cover. Do not use long nap roller covers. **Brush:** Use high quality natural or synthetic bristle brushes.

Note: Two or more coats may be required to obtain recommended film thicknesses.

#### SURFACE TEMPERATURE

Minimum 40°F (4°C) Maximum 120°F (49°C)

The surface should be dry and at least 5°F (3°C) above the dew point. Cure time necessary to resist direct contact with moisture at surface temperature: 75°F (24°C): 13 hours. If the coating is exposed to moisture before the preceding cure parameters are met, dull, flat or spotty-appearing areas may develop. Actual times will vary with air movement, film

#### CLEANUP

Flush and clean all equipment immediately after use with the recommended thinner, xylene or MEK, or use appropriate cleanup solvents that comply with applicable regulations.

† Values may vary with color.

WARRANTY & LIMITATION OF SELLER'S LIABILITY: Themee Company, Inc. warrants only that its coatings represented herein meet the formulation standards of Themee Company, Inc. THE WARRANTY DESCRIBED IN THE ABOVE PARAGRAPH SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The exclusive remedy against Themee Company, Inc. shall be for replacement of the product in the event a defective condition of the product should be found to exist and the exclusive remedy shall not have failed its essential purpose as long as Themee is willing to provide comparable replacement product to the buyer. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, ENVIRONMENTAL INJURIES OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE BUYER. Technical and application information herein is provided for the purpose of establishing a general profile of the coating and proper coating application procedures. Test performance results were obtained in a controlled environment and Themee Company makes no claim that these tests or any other tests, accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating.



## **ENDURANAR SERIES 750**

#### PRODUCT PROFILE

**GENERIC DESCRIPTION** Polyfunctional Aliphatic Urethane

COMMON USAGE Hybrid polyurethane finish coat combining low VOC with exceptional performance. Offers superior color and gloss

retention for long-term aesthetics on a wide range of exterior structures. Durable film stands up to exterior weathering.

Very good brush, roll and spray application characteristics. NOT FOR IMMERSION SERVICE.

Refer to Tnemec Color Guide. **Note:** Certain colors may require multiple coats depending on method of application and finish coat color. When feasible, the preceding coat should be in the same color family (blue, gray, etc.), but noticeably

different.

FINISH Semi-gloss

COLORS

#### **COATING SYSTEM**

**PRIMERS** 

**Steel:** Series 1, 27, 66, L69, L69F, N69, N69F, V69, V69F, 90G-1K97, 90-97, H90-97, 91-H<sub>2</sub>O, 94-H<sub>2</sub>O, 135, L140, L140F, N140, N140F, V140, V140F, 161, 394 **Concrete:** Series 1, 27, 66, L69, L69F, N69, N69F, V69, V69F, 161 **Note:** Series 1, 27, 66, 91-H<sub>2</sub>O, 94-H<sub>2</sub>O, 135 or 394 exterior exposed more than 30 days, or Series L69/L69F, N69/N69F, V69/V69F, L140/L140F, N140/N140F, or V140/V140F exterior exposed more than three months must first be scarified or

reprimed with themselves. Brush blasting with fine abrasive is the preferred method of scarification.

**TOPCOATS** 

Series 76, 700, 700V, 701V, 701V, 740, 1070, 1070V, 1071, 1071V, 1072, 1072V, 1077V, 1078

Note: When topcoating Series 750 with itself, 740, V700 or 76, the maximum recoat time is 30 days.

#### **SURFACE PREPARATION**

**ALL SURFACES** Must be clean, dry and free of oil, grease and other contaminants. See primer product data sheet for surface preparation

#### TECHNICAL DATA

**VOLUME SOLIDS**  $72.0 \pm 2.0\%$  (mixed) †

**CURING TIME** 

2.5 to 5.0 mils (65 to 125 microns) per coat. **Note:** Number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative. RECOMMENDED DFT

Temperature To Touch To Handle To Recoat 75°F (24°C) 2 hours 6-8 hours

Curing time varies with surface temperature, air movement, humidity and film thickness. Note: For faster curing and low-

temperature applications, add No. 44-712 Urethane Accelerator; see separate product data sheet.

**VOLATILE ORGANIC COMPOUNDS** Unthinned: 0.82 lbs/gallon (99 grams/litre)

Thinned 10% (No. 68 Thinner): 0.82 lbs/gallon (99 grams/litre) Thinned 10% (No. 49 Thinner): 0.82 lbs/gallon (99 grams/litre) †

HAPS Unthinned: 0 lbs/gal solids

Thinned 10% (No. 68 Thinner): 0 lbs/gal solids Thinned 10% (No. 49 Thinner): 0 lbs/gal solids

THEORETICAL COVERAGE 1155 mil sq ft/gal (28.3 m²/L at 25 microns) †

NUMBER OF COMPONENTS Two: Part A and Part B

> MIXING RATIO By volume: Four (Part A) to one (Part B)

**PACKAGING** 

	PART A (Partially filled)	PART B (Partially filled)	When Mixed
Large Kit	5 gallon pail	1 gallon can	3 gallons (11.3L)
Small Kit	1 gallon pail	1 quart can	1 gallon (3.79L)

NET WEIGHT PER GALLON  $12.47 \pm 0.25$  lbs  $(5.66 \pm .11 \text{ kg})$  †

STORAGE TEMPERATURE Minimum 20°F (-7°C) Maximum 110°F (43°C)

TEMPERATURE RESISTANCE (Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)

SHELF LIFE 12 months at recommended storage temperature. FLASH POINT - SETA Part A: 105°F (41°C) Part B: 109°F (43°C)

**HEALTH & SAFETY** Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Material

Safety Data Sheet for important health and safety information prior to the use of this product. **Keep out of the reach of children**.

## **ENDURANAR | SERIES 750**

#### APPLICATION

#### **COVERAGE RATES**

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m²/Gal)
Suggested	2.5 (65)	3.5 (90)	462 (42.9)
Minimum	4.0 (100)	5.5 (140)	289 (26.8)
Maximum	5.0 (125)	7.0 (180)	231 (21.5)

Allow for overspray and surface irregularities. Film thickness is rounded to the nearest 0.5 mil or 5 microns. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance. †

MIXING

Stir contents of the container marked Part A, making sure no pigment remains on the bottom. Add the contents of the can marked Part B to Part A while under agitation. Continue agitation until the two components are thoroughly mixed. Do not use mixed material beyond pot life limits. Caution: Part B is moisture-sensitive and will react with atmospheric moisture. Keep unused material tightly closed at all times.

THINNING

For air or airless spray, thin up to 10% or 1/2 pint (380 mL) per gallon with No. 68 Thinner. For brush or roller, thin up to 10% or 1/2 pint (380 mL) per gallon with No. 49 Thinner. Thinning is required for proper brush or roller application. Caution: Do not add thinner if more than thirty (30) minutes have elapsed after mixing.

POT LIFE

hour at 75°F (24°C)

#### APPLICATION EQUIPMENT

#### Air Spray

Gun	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbiss JGA	Е	765 or 704	5/16" or 3/8" (7.9 or 9.5 mm)	3/8" or 1/2" (9.5 or 12.7 mm)	50-65 psi (3.4-4.5 bar)	10-20 psi (0.7-1.4 bar)

Low temperatures or longer hoses require higher pot pressure.

#### Airless Spray

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.015"-0.019"	3500-4000 psi	1/4" or 3/8"	60 mesh
0-480 microns)	(240-275 bar)	(6.4 or 9.5 mm)	(250 microns)

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions.

Roller: Use 1/4" or 3/8" (6.4 mm or 9.5 mm) synthetic woven nap roller cover. Do not use long nap roller covers.

Brush: Use high quality natural or synthetic bristle brushes.

Note: Two or more coats may be required to obtain recommended film thicknesses.

#### SURFACE TEMPERATURE

Minimum 40°F (4°C) Maximum 120°F (49°C)

The surface should be dry and at least 5°F (3°C) above the dew point. Cure time necessary to resist direct contact with moisture at surface temperature: 75°F (24°C): 13 hours. If the coating is exposed to moisture before the preceding cure parameters are met, dull, flat or spotty-appearing areas may develop. Actual times will vary with air movement, film

CLEANUP

Flush and clean all equipment immediately after use with the recommended thinner, xylene or MEK, or use appropriate cleanup solvents that comply with applicable regulations.

† Values may vary with color.

WARRANTY & LIMITATION OF SELLER'S LIABILITY: Themee Company, Inc. warrants only that its coatings represented herein meet the formulation standards of Themee Company, Inc. THE WARRANTY DESCRIBED IN THE ABOVE PARAGRAPH SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The exclusive remedy against Themee Company, Inc. shall be for replacement of the product in the event a defective condition of the product should be found to exist and the exclusive remedy shall not have failed its essential purpose as long as Themee is willing to provide comparable replacement product to the buyer. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, ENVIRONMENTAL INJURIES OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE BUYER. Technical and application information herein is provided for the purpose of establishing a general profile of the coating and proper coating application procedures. Test performance results were obtained in a controlled environment and Themee Company makes no claim that these tests or any other tests, accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating.



# Endura-Shield® UVX SERIES 740

#### ABRASION

METHOD: ASTM D 4060 (CS-17 Wheel, 1,000 gram load).

SYSTEM: Two coats Series 740 Endura-Shield UVX cured 30 days at 75°F (24°C). REQUIREMENT: No more than 129 mg loss after 1,000 cycles, average of three tests. (TR5856)

#### ADHESION

METHOD: ASTM D 4541 (Type II Tester).

SYSTEM: Series L69 Hi-Build Epoxoline II/Series 740 Endura-Shield UVX applied to SSPC-SP10/NACE No. 2 Near-White Metal Blast

Cleaned steel and cured 14 days at 75°F (24°C).

REQUIREMENT: No less than 1,633 psi (11.25 MPa) pull, average of three tests.

#### CLEANABILITY

METHOD: MIL-PRF-85285C Section 4.6.13.

SYSTEM: Series 66 Hi-Build Epoxoline/Series 740 Endura-Shield UVX cured 30 days at 75°F (24°C).

REQUIREMENT: No less than 84% cleaning efficiency, average of two tests. (TR5997)

#### FLEXIBILITY

METHOD: ASTM D 522 (Method A - Conical Mandrel).

SYSTEM: Series L69 Hi-Build Epoxoline II/Series 740 Endura-Shield UVX applied to SSPC-SP7 Brush-Off Blast Cleaned steel and

cured 30 days at 75°F (24°C).

REQUIREMENT: No less than 4% elongation, average of three tests. (TR5829)

#### FUNGAL AND ALGAL DEFACEMENT

METHOD: ASTM D 5590.

SYSTEM: Series L69 Hi-Build Epoxoline II/Series 740 Endura-Shield UVX applied to glass fiber filter paper and cured 14 days at

Spore Suspensions: (1) Aspergillus niger (ATTC 6275) and Penicillium funiculosum (ATTC 11797) and (2) Auerobasidium

pullutans (ATTC 9348).

REQUIREMENT: No fungal or algal growth after 4 weeks exposure. (TR5859)

#### **GRAFFITI RESISTANCE**

METHOD: The following graffiti materials applied to coating and allowed to dry for seven days.

SYSTEM: Series L69 Hi-Build Epoxoline II/Series 740 Endura-Shield UVX applied to SSPC-SP7/NACE No. 4 Brush-Off Blast Cleaned

steel and cured 30 days at 75°F (24°C).

Reagent	Series 680	Xylene	MEK
Acrylic Spray Paint	Removal	Faint Shadow	Faint Shadow
Alkyd Spray Paint	Removal	Removal	Removal
Ball Point Ink	Faint Shadow	Faint Shadow	Removal
Crayon	Removal	Faint Shadow	Removal
Epoxy Spray Paint	Removal	Removal	Removal
Lipstick	Faint Shadow	Faint Shadow	Faint Shadow
Markette Marker	Faint Shadow	Faint Shadow	Removal

REQUIREMENT: Some slight gloss loss and/or softening may occur depending on the amount of effort required for removal of the graffiti

and length of exposure of the underlying coating to the cleaning solvents. (TR5965)

# Endura-Shield® UVX | SERIES 740

#### **HARDNESS**

METHOD: ASTM D 3363.

SYSTEM: Series L69 Hi-Build Epoxoline II/Series 740 Endura-Shield UVX applied to SSPC-SP7/NACE No. 4 Brush-Off Blast Cleaned

steel and cured 30 days at 75°F (24°C).

**REQUIREMENT:** No gouging or scratching with an HB or less pencil. (TR5830)

HUMIDITY

METHOD: ASTM D 4585.

SYSTEM: Series L69 Hi-Build Epoxoline II/Series 740 Endura-Shield UVX applied to SSPC-SP10/NACE No. 2 Near-White Metal Blast

Cleaned steel and cured 14 days at 75°F (24°C).

REQUIREMENT: No blistering, cracking, rusting or delamination of film after 2,000 hours exposure. (TR5848)

QUV EXPOSURE

METHOD: ASTM D 4587 (UVA-340 bulbs, 8 hours light, 4 hours dark).

Series 66 Hi-Build Epoxoline/Series 740 Endura-Shield UVX applied to SSPC-SP1 Solvent Cleaned aluminum and cured

seven days at 75°F (24°C).

REQUIREMENT: No blistering, cracking, chalking or delamination of film. No less than 84% gloss retention, no more than 13 units gloss

loss and no more than 1.31 DE<sub>00</sub> color change after 10,000 hours exposure. (TR5849-A)

SALT SPRAY (FOG)

METHOD: ASTM B 117.

SYSTEM:

SYSTEM: Series L69 Hi-Build Epoxoline II/Series 740 Endura-Shield UVX applied to SSPC-SP10/NACE No. 2 Near-White Metal Blast

Cleaned steel and cured 14 days at 75°F (24°C).

REQUIREMENT: No blistering, cracking, rusting or delamination of film. No more than 3/16 inch rust creepage at scribe after 2,500 hours

exposure. (TR5850)

This product will meet or exceed the above test requirements established for the coating systems listed. Test performance results were obtained in a controlled environment and Tnemec Company makes no claim that these tests or any other tests accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating. Published technical data is subject to change without notice. The online catalog at www.tnemec.com should be referenced for the most current technical data and instructions. For additional performance criteria and specific test results, contact Tnemec Company or its representative.

### Endura-Shield Series 750 PRELIMINARY PERFORMANCE CRITERIA

#### ABRASION

Method: ASTM D 4060 (CS17 Wheel, 1000 gram load)

System: Two coats Series 750 Endura-Shield WB cured 30 days at 75 F (24 C). Requirement: No more than 129 mg loss after 1000 cycles, average of three tests.

TR5856)

#### **ADHESION**

Method: ASTM D 4541 (Type II Tester)

System: Series L69 HB Epoxoline/Series 750 Endura-Shield applied to SSPC-

SP10 Near-White Blast cleaned steel and cured 14 days at 75 F (24 C).

Requirement: No less that 1,633 psi (11.25 MPa) pull, average of three tests.

(GP.823)

Method: ASTM D 4541 (Type V Tester)

System: Series L69 HB Epoxoline/Series 750 Endura-Shield applied to SSPC-

SP10 Near-White Blast cleaned steel and cured 14 days at 75 F (24 C).

Requirement: No less that 1,376 psi (9.48 MPa) pull, average of three tests.

(GP.823)

### **CLEANABILITY**

Method: MIL-PRF-85285C Section 4.16.13 – Cleanability

System: Series 66 HB Epoxoline/Series 750 Endura-Shield cured 30 days at 75 F

(24 C).

Requirement: No less than 84% cleaning efficiency, average of two tests. (TR5818)

#### FLEXIBILITY

Method: ASTM D 522 (Method A – Conical Mandrel).

System: Series L69 HB Epoxoline/Series 750 Endura-Shield applied to SSPC-

SP7 Brush-Off Blast cleaned steel and cured 30 days at 75 F (24 C).

Requirement: No less than 4% elongation, average of three tests. (TR5829)

#### FUNGAL AND ALGAL DEFACEMENT

Method: ASTM D 5590

Spore Suspensions: 1)Aspergillus niger and Penicillium funiculosum

2) Aureobasidium pullulans

System: Series L69 HB Epoxoline/Series 750 Endura-Shield applied to glass

fiber filter paper and cured 14 days at 75 F (24 C).

Requirement: No fungal or algal growth after 4 weeks exposure. (GP.883)

## Endura-Shield Series 750 PRELIMINARY PERFORMANCE CRITERIA

#### HARDNESS

Method: ASTM D 3363

System: Series L69 HB Epoxoline/Series 750 Endura-Shield applied to SSPC-

SP7 brush-off blast cleaned steel and cured 30 days at 75 F (24 C).

Requirement: No gouging of scratching with an HB or less pencil. (TR5830)

### HUMIDITY

Method: ASTM D 4585

System: Series L69 HB Epoxoline/Series 750 Endura-Shield applied to SSPC-

SP10 Near-White Blast cleaned steel and cured 14 days at 75 F (24 C).

Requirement: No blistering cracking rusting or delamination of film after 2,000

hours exposure. (TR5848)

### SALT SPRAY (FOG)

Method: ASTM B 117

System: Series L69 HB Epoxoline/Series 750 Endura-Shield applied to SSPC-

SP10 Near-White Blast cleaned steel and cured 14 days at 75 F (24 C).

Requirement: No blistering, cracking, rusting or delamination of film. No more

than 3/16 inch rust creepage at scribe after 2,500 hours exposure. (TR5850)