



FLUORONAR[®] METALLIC SERIES 1078

PRODUCT PROFILE

GENERIC DESCRIPTION	Advanced Thermoset Solution Fluoropolymer
COMMON USAGE	A high-solids fluoropolymer coating that provides an ultra-durable metallic or pearlescent finish. It has outstanding color and gloss retention even in the most severe exposures. Under certain conditions, it may be used to restore aged fluoropolymer coil applied coatings. Contact Tnemec Technical Services or your local Tnemec representative for details.
COLORS	Available in 41 standard colors. (Series 1078 is not available in 49MT). Refer to Tnemec Metallic Color Guide. Custom colors also available. Certain colors may require a clear topcoat for optimum performance. Note: Variations in appearance between product samples, color cards, color sheets and actual field applications should be expected due to differences in environmental conditions, color of underlying coats, gloss level, orientation of metallic pigment, equipment and applicator technique. Reference Technical bulletin No. 07-65 for more information.
FINISH	Semi-gloss.
SPECIAL QUALIFICATIONS	Standard Series 1078 colors will meet the requirements of the Metallic Pigmented coatings category for use in air districts with more restrictive VOC regulations.
PERFORMANCE CRITERIA	Contact your Tnemec representative for specific test results.

COATING SYSTEM

PRIMERS	Steel: Series 1, 27, 27WB, 66, L69, L69F, N69, N69F, V69, V69F, 90-97, H90-97, 91-H ₂ O, 94-H ₂ O, 118, 135, 161, 394, 1224. Note: Series 1 and 394 require an intermediate coat prior to topcoating with Series 1078. Note: Series 118 is typically used to overcoat, sound, existing coating systems. See product data sheet for more information.
INTERMEDIATE	Series 73, 750, 1075, 1075U, 1095 (Intermediate coat may be required for some applications, please contact Tnemec.) Note: When topcoating with Series 1078, the following maximum recoat times apply: Over 27, 66, L69, L69F, N69, N69F, V69, V69F, 135, 161 14 days; over itself, 30 days; over 750, 1075, 1075U, 1095, 45 days; over 1, 394, 60 days; over 73, 90-97, H90-97, 91-H ₂ O, 94-H ₂ O, 1224, 90 days. Note: If an intermediate coat is required, it should be in the same color family but noticeably different than the topcoat color. Tnemec will specify the intermediate color.
TOPCOATS	Series 1079-0762 (semi-gloss), 1079-0763 (satin) Note: When topcoating with Series 1079-0762 (semi-gloss) or 1079-0763 (satin) over 1078, a 24 hour maximum recoat time applies. Series 1078 cannot be topcoated with Series 1079 (high gloss).

SURFACE PREPARATION

AGED COATINGS	Adhesion test patches are required. Contact Tnemec Technical Services or your Tnemec representative for recommendations.
ALL SURFACES	Must be clean, dry and free of oil, grease and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS	54.0 ± 2.0% (mixed) †
RECOMMENDED DFT	2.0 to 3.0 mils (50 to 75 microns) per coat.
CURING TIME	

Temperature	To Touch	To Handle	Minimum Recoat ‡
90°F (32°C)	30 minutes	4-6 hours	6-8 hours
70°F (21°C)	30 minutes	6-8 hours	10-12 hours
50°F (10°C)	1 hour	12-15 hours	16-24 hours

‡ Maximum recoat: 30 days. Curing time varies with surface temperature, air movement, humidity and film thickness. **Note:** For faster curing and low-temperature applications, add No. 44-710 Urethane Accelerator; see separate data sheet.

VOLATILE ORGANIC COMPOUNDS	Unthinned: 2.94 lbs/gallon (352 grams/litre) Thinned 15% (No. 63 Thinner): 3.43 lbs/gallon (411 grams/litre) †
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HAPS	Unthinned: 4.09 lbs/gal solids Thinned 15% (No. 63 Thinner): 4.06 lbs/gal solids
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THEORETICAL COVERAGE	866 mil sq ft/gal (21.3 m ² /L at 25 microns). †
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NUMBER OF COMPONENTS	Two: Part A and Part B
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MIXING RATIO	By volume: Five (Part A) to one (Part B)
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	PART A	PART B	Yield (mixed)
Medium Kit	5 gallon pail partially filled	1/2 gallon can	3 gallons (11.35 L)
Small Kit	1 gallon can partially filled	1 quart can partially filled	1 gallon (3.79 L)

NET WEIGHT PER GALLON	10.17 ± 0.25 lbs (4.61 ± .11 kg) (mixed) †
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STORAGE TEMPERATURE	Minimum 20°F (-7°C) Maximum 110°F (43°C)
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TEMPERATURE RESISTANCE	(Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)
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SHELF LIFE	12 months at recommended storage temperature.
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FLASH POINT - SETA	Part A: 85°F (29°C) Part B: 130°F (54°C)
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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.

APPLICATION

COVERAGE RATES

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m ² /Gal)
Suggested	2.5 (65)	4.5 (115)	346 (32.2)
Minimum	2.0 (50)	3.5 (90)	433 (40.2)
Maximum	3.0 (75)	5.5 (140)	289 (26.8)

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 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

Thinning is required for proper application. For air spray, thin 5% to 15% (177 mL to 561 mL) per gallon with No. 63 Thinner. **Caution: Do not add thinner if more than thirty (30) minutes have elapsed after mixing.**

POT LIFE

2 hours at 50°F (10°C) 2 hours at 70°F (21°C) 1 hour at 90°F (32°C)

APPLICATION EQUIPMENT

Air Spray

Gun	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbiss JGA	E	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)	75-90 psi (5.2-6.2 bar)	10-20 psi (0.7-1.4 bar)

Low temperatures or longer hoses require higher pot pressure. Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions.

Contact Tnemec Company for additional information on application methods.

Note: Brush and roller application is not recommended as it could adversely affect the appearance.

Note: The finished appearance of 1078 can be affected by applicator technique, equipment and environmental conditions. A jobsite mock-up is recommended prior to full-scale application. Reference Technical Bulletin No. 07-65 for more information.

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:

Temperature	To Resist Moisture
100°F (38°C)	2 hours
90°F (32°C)	3 1/2 hours
80°F (27°C)	5 hours
70°F (21°C)	7 hours
60°F (16°C)	11 hours
50°F (10°C)	21 1/2 hours
40°F (4°C)	44 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 thickness and humidity.

CLEANUP

Flush and clean all equipment immediately after use with the recommended thinner or MEK.

† Values may vary with color.

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