

**TRIANGLE OEM****Trilon S™****High Solids, Low VOC, Acrylic Urethane Topcoat**Base Part A **249**  
Activator Part B **249B****SPECIFICATIONS****DESCRIPTION:**

**Trilon S** is the newest generation 2-part acrylic urethane topcoat utilizing cutting edge technology. **Trilon S** cures to a tough, abrasion resistant film that resists most chemicals. This product exhibits excellent gloss and color retention when exposed to extreme weather in exterior applications. When applied over a high performance primer, **Trilon S** meets or exceeds most OEM specifications for off road vehicles.

**USE:**

**Trilon S** is ideal for use on:

- shop finished architectural components
- heavy construction equipment
- off road vehicles
- farm implement equipment
- other miscellaneous metal parts

Product results will vary by substrate and application method.

**It is the user's responsibility to determine the suitability and performance of this product for their application.**

**COLOR AVAILABILITY:**

**Trilon S** is available in factory colors; refer to Triangle Industrial Products color card. Custom colors available; minimum order is required. Special costing will be applied.

**ORDER CODE:** [Mix Ratio: 4 Part A : 1 Part B, by volume]

Part A [base] ..... 249 + gloss + color  
Part B [activator] ..... 249B

Individual products are identified by the product series number, followed by a gloss identifier and color number.

Ex: 249G700 is Trilon S, Gloss, White.

This product is available in:

Gloss ..... G  
Semi-Gloss ..... S  
Matte ..... M

**PACKAGING:**

Part A:	Part B:
1 gallon cans	1 quart cans
5 gallon pails	1 gallon cans
55 gallon drums	5 gallon pails

**KITS:** This product may be packaged in kits, containing both Part A and Part B components. Kit containers may be partially filled to obtain total yield when mixed.

Total Yield:	Part A:	Part B:
40 ounces	1 quart	1 half pint
1.25 gallons	1 gallon*	1 quart
5 gallons	4 gallon*	1 gallon*

*\*Southern California Air Quality Management District regulates this product only be purchased/used in quart sizes or smaller. Sizes larger than 1 quart may NOT be purchased for use as an Architectural or Maintenance coating in regions with these regulations.*

**ADVANTAGES:**

- Low VOC
- Very long term gloss and color retention
- Very high gloss
- Excellent chemical and weather protection
- Very good impact and abrasion resistance
- Excellent flexibility and chip resistance
- Extremely durable
- Meets or exceeds OEM topcoat specification

**LIMITATIONS:**

- Not recommended for immersion into gasoline, diesel, hydraulic fluids or solvents
- For long term salt spray resistance, epoxy primer required
- Maximum RH at worksite: 75%

**PROPERTIES****DRY SCHEDULE:** [at 50% RH and 1.5 mil DFT]

	60° F	77° F	90° F
<b>Dry to Touch</b>	60 mins	45 mins	25 mins
<b>Recoat</b>	8 hrs	2 hrs	60 mins
<b>Dry to Handle</b>	8 hrs	2 hrs	60 mins
<b>Full Cure</b>	7 days	7 days	7 days

**Critical Recoat Window:** After one week light sanding may be necessary if coating is subject to extended exterior exposure.

**VOC:** [excluding exempt solvents, mixed] ..... 2.00 lbs/gal (242 g/l)

**VOC:** [including exempt solvents, mixed] ..... 1.31 lbs/gal (154 g/l)

**FLASH POINT:** [setaflash, mixed] ..... 76° F (24.4° C)

**WEIGHT PER GALLON:** [mixed] .. 11.2 ± 0.5 lbs (1.34 kg/liter)

**APPLICATION VISCOSITY:** [recommended, mixed]

# 3 Zahn Seconds ..... 25-30

**SOLIDS:** [average, mixed]

% By Weight ..... 65 ± 2%

% By Volume ..... 58 ± 2%

**COVERAGE:** [average, mixed]

Theoretical at 1.5 mil DFT ..... 620 sq ft/gal

**REQUIRED FILM THICKNESS:**

ASTM D1005 Minimum Dried Film ..... 1.5 mil (38µ)

ASTM D4414 Minimum Wet Film ..... 3.0 mil (76µ)

**ASTM D523 GLOSS:**

@ 60° ..... 90

@ 20° ..... 75

**ASTM D3363 PENCIL HARDNESS:**

3H ..... Pass

**ASTM D5402 MEK RUBS:**

200 Double ..... Pass

**ASTM D2794 IMPACT RESISTANCE:**

160 inlb forward, 160 inlb reverse ..... Pass

**ASTM B117 SALT SPRAY RESISTANCE:**

5% Salt Spray, 150 hours [BondRite 1000] ..... Pass

**ASTM D5894UV CORROSION WEATHERING:**

ASTM D610 Rusting 7 cycles, 150 hours ..... Pass

ASTM D714 Blistering 7 cycles, 100 hours ..... Pass

**ASTM D4587/D523/D4214 QUV-UVA:**

500 hours @ 60° ..... 10% loss

1000 hours @ 60° ..... 20% loss

**ASTM D2247/D714 HUMIDITY RESISTANCE:**

400 hours [unscribed] ..... Pass

**ASTM D4585 MOISTURE CONDENSATION:**

100° F, 400 hours ..... Pass

**ASTM D3359 ADHESION:**

5B ..... Pass

**ASTM D4060 ABRASION RESISTANCE:**

CS17 wheel, 110 cycles, 1 kg load ..... < 10 mg

**ASTM D522 FLEXIBILITY:**

180° bend, 1/4" mandrel ..... Pass

**ASTM D3170 CHIP RESISTANCE:**

Rating ..... N/A

**ASTM D2485 DRY HEAT RESISTANCE:**

200° F ..... Pass

**WET HEAT RESISTANCE:**

180° F Non-immersion ..... Pass

**ASTM D2243 WATER-BORNE FREEZE THAW:**

3 cycles ..... N/A

Properties listed above correspond to formula for gloss, white product and may vary by gloss level and/or color. All tests conducted at 1.5-2.0 mils DFT on Bondrite™ 1000 Q-steel panels, fully cured, 7 days, air dry, at 77° F and 50% RH.

**TRIANGLE COATINGS, INC.**

Sales: 925-583-0800

www.tricoat.com



**Trilon S™****High Solids, Low VOC, Acrylic Urethane Topcoat****APPLICATION DATA****SURFACE PREPARATION:**

All surfaces must be clean, dry, and free of contaminants. All dirt, grease, rust, mill scale, or loose chalky paint must be removed.

Recommended surface preparation includes:

- surface blasting to remove all mill scale (maximum profile: 0.5-1.0 mils)
  - iron phosphate\* (35-40 milligrams per square foot)
  - zinc phosphate\* (25-30 milligrams per square foot)
- \*seal coat or DI final rinse recommended

**APPLICABLE SUBSTRATES:** [when properly prepared]

- ferrous or non ferrous
- primed galvanized
- primed aluminum
- concrete

**RECOMMENDED PRIMERS:**

- **956P TriBond S** - extreme corrosion resistant, epoxy
- Consult Triangle Coatings for other primer recommendations.

**APPLICATION TEMPERATURE:**

- Substrate must remain 10° F above the dew point during application and for 24 hours after application.
- Not recommended for substrate temperatures below 50° F or above 100° F.

**MIXING PARAMETERS:**

**Ratio:** ..... [Part A : Part B]  
By Weight [249G700] ..... 4.95 : 1.00  
By Volume ..... 4.00 : 1.00

**Sweat-in Time:** ..... none

**ASTM D2196 Pot Life:** [valid for qtys of 1 gallon or more]

50° F	65° F	77° F	85° F
5 hrs	4 hrs	4 hrs	3 hrs

**APPLICATION METHODS:**

**Trilon S** can be applied by HVLP, air assist airless, or airless spray. For **electrostatic applications**, please contact your Triangle Coatings representative.

**HVLP:**

Fluid Tip and Needle: ..... .030 - .040"  
Fluid Pressure: ..... 10-15 psi  
Air Cap Pressure: ..... 60 psi

**Air Assist Airless:**

Fluid Tip: ..... .012 - .013"  
Fluid Pressure: ..... 900-1,400 psi  
Air Cap Pressure ..... 10 psi

**Airless:**

Fluid Tip: ..... .013 - .015"  
Fluid Pressure: ..... 2,000-2,500 psi

**Brush or Roller:** ..... no

**THINNING:** ..... AT75

**CLEANUP:** ..... AT75; acetone

Clean tools while **Trilon S** is still wet.

**HEALTH & SAFETY PRECAUTIONS****WARNING:**

**FLAMMABLE LIQUID AND VAPOR. DO NOT INGEST.** May be harmful if swallowed or inhaled. Vapor may affect the brain or nervous system causing dizziness, headache, or nausea and can cause nose and throat irritation. Liquid contact with eye and skin causes irritation. Keep away from sparks, heat, or open flame. Use with adequate ventilation. Avoid breathing of vapor. Avoid contact with eyes and skin. Wash hands thoroughly after using and before eating and smoking. Wear an appropriately fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor levels are below applicable limits. Keep container closed when not in use. If spillage occurs, absorb and dispose of according to local regulations.

**Contains:**

aromatic hydrocarbon mixture, CAS#64742-95-6  
bis 1,2,2,6,6-pentamethyl-4-piperdiny, CAS#41556-26-7  
4-chlorobenzotrifluoride, CAS#98-56-6  
homopolymer of HDI, CAS#28182-81-2  
n-butyl acetate, CAS#123-86-4  
propylene glycol methyl ether acetate, CAS#108-65-6  
polyol  
xylene, CAS#1330-20-7

**FIRST AID:**

Should eye contact occur, flush with plenty of water for at least 15 minutes and get medical attention if vision is disturbed. For skin, wash thoroughly with soap and water. If swallowed, seek medical attention immediately. **DO NOT** induce vomiting.

**NOTICE:**

Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. This product does not contain materials listed in California Proposition 65.

**THIS PRODUCT FOR PROFESSIONAL USE ONLY.  
KEEP OUT OF REACH OF CHILDREN.**

**SHIPPING & HANDLING****SHIPPING DESCRIPTION:** [CFR 49]

**Ground, Air, Vessel** ..... Paint, 3, UN1263, PG III  
Required Label ..... FLAMMABLE LIQUID  
Required Marking ..... PAINT UN1263

**IMDG PACKAGING:**

FLAMMABLE LIQUID, class 3.3, UN1263, III

**IMDG STOWAGE:** ..... Category A

**UNIFORM FIRE CODE:** [CFR 29] ..... CLASS II

**STORAGE TEMPERATURE:** ..... 120° F max

**SHELF LIFE:** [warranted] ..... 1 YEAR

**HMIS® RATINGS:** ..... H - 2; F - 3; R - 0; PP - H

**WARRANTY:** The statements made herein, on labels, product bulletins, or by any of Triangle Coatings', Inc. employees or agents concerning this product are given for general information only. Due to variables beyond Triangle's control in application, surface preparation, surface temperature, humidity and other variable factors Triangle assumes no liability for any claim that may arise out of the use of its products and disclaims any warranty expressed or implied relating to the storage, application, thinning, merchantability, Buyer's assumption of performance, and the fitness for a particular purpose. Receipt of products from Triangle or its agents constitutes acceptance of the terms of this warranty. In the event that Triangle finds that the product delivered is not of Triangle's standard quality, Triangle will at its sole discretion, either replace the product or refund the purchase price. Triangle's choice of one of these remedies shall be the Buyer's sole remedy. Triangle will under no circumstances be liable for consequential damages, except insofar as liability is mandated by law. Triangle will deliver products at agreed times insofar as it is reasonably able to do so, but it will not be liable for failure to deliver on time when the failure is beyond its reasonable control.

Product Data Sheets are periodically updated to reflect new information relating to the product. It is important to obtain the most recent Product Data Sheet for the product being used before application. OEM249-10/13-007

TRIANGLE COATINGS, INC. 4763 Bennett Drive, Livermore, CA 94551-4804 • Tel: 925-583-0800 • Fax: 925-583-0880 • [www.tricoat.com](http://www.tricoat.com)