

TRIANGLE INDUSTRIAL**TriGuard™****Silicone Alkyd Enamel****Specifications****DESCRIPTION:**

TriGuard 33 Series is a high gloss, solvent borne silicone alkyd enamel. Silicone alkyds provide the best gloss retention and durability possible in single component material, rivaling automotive acrylics with a urethane hardener. They give iron and steel the best protection against moisture (corrosion) in a single component product. Silicone alkyd enamels also feature excellent resistance to elevated temperatures up to 350° F. **TriGuard** combines these features with fast dry and an exceptionally hard, uniform finish that rivals factory baked systems for appearance and serviceability. **TriGuard** is recommended whenever exterior iron or steel requires protection against corrosion, heavy handling and dirt with long term gloss retention, serviceability and an overall good appearance.

USE:

TriGuard is recommended equally for primed metal or wood and can be applied directly to clean, min. SSPC-SP1, iron or steel.

Typical uses include storage tanks, transmission pipes, structural steel, stadium components, light towers, bridges, commercial/industrial entry doors, hand railings, special trim, smoke stacks, boiler fronts and metal structures in severe climates such as weather stations, ski lifts and lighthouses. It is also used to finish and refinish trailers, farm equipment and truck accessories.

ADVANTAGES:

- Outlasts conventional alkyds by over 3:1
- Excellent resistance to weather
- High gloss
- Withstands temperatures up to 350° F
- Excellent protection against corrosion
- Superior application properties

LIMITATIONS:

- Limited chemical resistance. Not recommended for direct contact with gasoline, diesel, hydraulic fluids and solvents.
- Dries too fast to recommend brushing large surfaces.
- Galvanized metal and wood must be primed prior to applying **TriGuard**.

Properties

VOC: [as packaged] 400 g/l – (3.34 lbs/gal)

FLASH POINT: [setaflash] 79° F

APPEARANCE: [Gloss at 60°]

High Gloss (G) @ 60° 80-90

@ 20° 75-85

Semigloss (S) @ 60° 40-65

WEIGHT PER GALLON: [average] 8-10 lbs

PACKAGE VISCOSITY: 77-82 KU

SOLIDS: [average]

By Weight 67 ± 1%

By Volume 49 ± 1%

COVERAGE: [average]

Theoretical at 1 mil DFT 789 sq ft/gal

Theoretical at 1.5 mils DFT 394 sq ft/gal

Required Minimum DFT 1.5 mils

DRY SCHEDULE: [at 50% RH and 1.5 mils DFT]

	45° F	60° F	75° F	90° F
Tack Dry	60 mins	45 mins	30 mins	15 mins
Handle	18 hrs	10 hrs	5 hrs	4 hrs
Recoat	36 hrs	18 hrs	12 hrs	8 hrs
Hard Cure	96 hrs	48 hrs	24 hrs	24 hrs

ORDER CODE:

TriGuard is packaged in white and a full base system. It is formulated for use with Colortrend 844 Industrial Colorants and can be tinted to most colors. Nonmetallic, architectural or industrial colors can be factory made with a 25 gallon minimum order. **TriGuard** products are identified by the product series number, followed by a gloss identifier (G=Gloss) and ending in the color number.

TriGuard, Gloss, White **33G700**

Code Sequence 33 + gloss + color

PACKAGING: [average]

Four ea. 1 gallon cans per case 46 lbs

One ea. 5 gallon metal pail 58 lbs

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 - 2; R - 0; PP - H

TriGuard™

Silicone Alkyd Enamel

Application Data

REQUIREMENTS:

- Surfaces and ambient temperatures must be between 42° and 95° F and minimum 5° F above dewpoint for normal application. Special procedures required from 28° F to 42° F and 95° F to 115° F. Secure procedures/approval from Triangle representative when applying in this range.
- Surfaces must be free of moisture, corrosion (flash rust OK), oils, loose paint, dirt, all forms of silicone, waxes, etc. SSPC-SP1, SP2 or SP3 as minimum.
- Performance over mill scale cannot be predicted. All scale should be removed.
- Provide adequate ventilation, eliminate open flame and any potential sources of sparking.
- Enamelled surfaces must be abraded to dull.

PRIMING:

Reference Triangle Coatings for a complete review of recommended primers and options.

Iron & Steel **903P Bakote Primer**
Galvanized **983P AquaMax Primer**
Wood **292 Apex Primer**

FILM DEVELOPMENT:

Optimum dry film thickness is 1.5 mils per coat. One coat over primed or previously painted surfaces, two or more coats over bare metal. However, without reduction it is difficult to apply VOC compliant alkyds that thin. Typical DFTs range between 1.75 and 2.0 mils. Maximum recommended wet film thickness is 4 wet mils unreduced or 2 mil DFT. Thicker films surface dry and are less durable. Unreduced, **TriGuard** applied at 525 sq.ft./gal. over smooth, sealed surfaces will produce a 1.50 mil DFT. Allow for 3% waste (1.75 mil DFT's = 450 sq ft/gal unreduced).

THINNING:

Thinning with most solvents is not legal in areas that have a VOC regulation of 420 g/l (3.5 lbs/gal). Maximum reduction to meet 420 is "1" ounces of solvent. However, exempt solvents are available in most areas and performance may be enhanced by thinning where/when legally permissible. In unregulated areas a 0 – 15% reduction with mineral spirits is recommended for brushing or airless spray, and a 15 – 25% reduction with xylene for conventional or HVLP spray. Exempt solvents vary in solvency and speed of evaporation. VOC regulations vary by state and county. Contact Triangle representatives directly for guidelines and recommendations.

APPLICATION:

TriGuard is designed for spray application. Use an airless on large structural surfaces - tanks, transmission pipes, etc. Use conventional when finishing doors, trailers, metal fabrications, etc. Use HVLP where legally required for shop finishing. Product design allows limited areas to be brushed effectively, window trim for example.

Airless: Any ¾ gpm or larger pump with a .013 – .015 tip. On large jobs and when pumping vertically is required, larger pumps are necessary. For fine finishing use a .011 – .013 tip with a Binks preorifice tip or a .012 – .014 Graco Fine Finish Tip.

HVLP: .040" – .055" fluid nozzle with a pressure feed. Fluid pressure to produce a 6" stream without air cap, 65 – 80 psi and 18 CFM air.

Conventional: .040 – .055 fluid nozzle; air cap sized to air supply feed and ability to thin.

Air Assist Airless: .011 tip and maximum possible fluid pressure.

CLEANUP: AT17 Wash Thinner
Rinse equipment with clear mineral spirits.

Health & Safety

WARNING:

FLAMMABLE LIQUID AND VAPOR. May be harmful if swallowed or inhaled. Vapor may affect the brain or nervous system causing dizziness, headache or nausea. Can cause nose and throat irritation. Keep away from sparks, heat or open flame. Use with adequate ventilation. Avoid breathing of vapor. Avoid contact with eyes, skin, and clothing. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor levels are below applicable limits. Follow respirator manufacturer's directions for use. Keep container closed when not in use. If spillage occurs, absorb and dispose of according to local regulations.

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.

**THIS PRODUCT IS FOR
PROFESSIONAL USE ONLY.**

**KEEP THIS PRODUCT OUT OF THE
REACH OF CHILDREN.**

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.

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