

TRIANGLE INDUSTRIAL**TriAqua™****VOC Compliant, Single Component,
Water Reducible Alkyd Enamel****Specifications****DESCRIPTION:**

TriAqua 16 Series is a high gloss, VOC complaint, single component, water reducible, air dry alkyd finishing enamel. It is designed for direct, two coat application to hand cleaned iron and steel, SSPC-SP1. Applied over bare sheet metal or alone, **TriAqua** produces a near automotive gloss. Full gloss retention lasts for two years. Metal is well protected for up to seven years. **TriAqua** has the fastest hard dry of any water reducible enamel and among the best early water resistance of any latex or alkyd. Adhesion and general durability are superior to any non-catalyzed alkyds. VOC compliant, **TriAqua 16 Series** has negligible environmental hazards and health hazards.

USE:

In VOC regulated areas, water reducible alkyds are the only type of single component finishing enamel that produce a traditional quality finish: very high gloss, excellent DOI, and no orange peel. In non regulated areas, water reducible products provide levels of worker safety unobtainable with solvent borne products. With proper use, **TriAqua** can eliminate solvent disposal and reduce overall cost. **TriAqua 16 Series** is recommended for any iron or steel fabrication not requiring special chemical or extreme abrasion resistance. **TriAqua** is specifically designed for larger air dry fabrications going into exterior service such as: farm and construction equipment, tools, trailers, light poles, gas cylinders and shop finished architectural components.

ADVANTAGES:

- Excellent finish and very high gloss
- Fast dry; fastest of any similar product
- Single component: guns and lines do not require cleaning after use.
- Superior adhesion and durability
- No primer required – DTM (Direct to Metal)

LIMITATIONS:

- Very temperature sensitive drying. Do not use under 50° F. Use above 85° F may require use of **AT70 Retarder**.
- Not recommended for submersion, below grade, or direct chemical contact service.
- May exhibit lower gloss if applied to other paints.
- May yellow slightly in absence of sunlight.
- Six month shelf life. Should be manufactured to order.

Properties

VOC: [including water] 124 g/l – (1.01 lbs/gal)
[excluding water] 324 g/l – (2.71 lbs/gal)
[actual VOC will vary depending on color]

FLASH POINT: [setaflash] 150° F

APPEARANCE: [average] @ 20° @ 60°

Gloss (G) 85-90 90-94

Semigloss (S) 35-44 44-50

WEIGHT PER GALLON: [average] 8.3-10.0 lbs

PACKAGE VISCOSITY: 75-80 KU

SOLIDS: [average]

By Weight 41.5 ± 3%

By Volume 30 ± 3%

COVERAGE: [average]

Theoretical at 1 mil DFT 480 sq ft/gal

Theoretical at 1.5 mils DFT 320 sq ft/gal

Recommended DFT per coat 2.5-3.0 mils

DRY SCHEDULE: [at 50% RH and 1.5 mil DFT-average]

	45° F	60° F	75° F	90° F
Dry to Touch	2 hrs	1 hrs	30 mins	15 mins
Handle/Recoat*	16 hrs	8 hrs	4 hrs	2 hrs
Hard Cure	168 hrs	96 hrs	72 hrs	48 hrs

TriAqua 16 Series may be force cured at 194° F for 15 mins.

*No max. recoat time and no water spotting after Hard Cure time. After 1 week, wash free of foreign matter. Light sanding may be necessary if cured coating is subject to exterior exposure for extended periods.

COLOR AVAILABILITY:

TriAqua 16G is available in factory ground colors with 50 gallon minimum order. 10-15 safety and traditional implement colors stocked. Many colors may be tinted, however hide may be compromised. Midtone and darker colors should be factory ground.

ORDER CODE:

TriAqua 16 Series products are identified by the product series number, followed by a gloss identifier (G=Gloss) and ending in the color number. Example:
TriAqua, Gloss, White 16G700

Code Sequence 16 + gloss + color

PACKAGING: [average]

Four ea. 1 gallon cans per case 50 lbs

One ea. 5 gallon plastic pail 60 lbs

Shipping & Handling

SHIPPING DESCRIPTION: [CFR 49]

Ground, Air, Vessel Non Regulated Material

Required Label & Marking Not Required

IMDG PACKAGING: Not Required

IMDG STOWAGE: Not Regulated

UNIFORM FIRE CODE: [CFR 29] CLASS III-A

STORAGE TEMPERATURE: 90° F max

..... 40° F min

HMIS RATINGS: H - 2; F - 1; R - 0; PP - G



TriAqua™**VOC Compliant, Single Component, Water Reducible Alkyd Enamel****Application Data****REQUIREMENTS**

- Both surface and ambient temperatures must be above 50° F and remain above 50° F for four hours after application.
- Applied material must be protected from all forms of moisture until rainproof as per chart above.
- Bare metal must be cleaned to min. SSPC-SP1.
- Existing paint must be fully adherent and free of all contaminants.
- Urethane and epoxies must be abraded to dull.
- Wood and galvanized metal must be primed.

PRIMING:

New Iron & Steel None
 New Galvanized **983P900**

FILM DEVELOPMENT & THICKNESS:

TriAqua is designed for application in 2 or more coats to produce a combined DFT of 2.5-3.0 mils. The first coat should be thinner than the second, but a full coat not a "tack coat." Normal DFTs are 1.0 – 1.25 first and 1.75 – 2.0 for the second. On smooth surfaces the rates below will produce the DFTs shown and allow for 5% waste.

1.25 mils DFT	345 sq ft/gal
1.5 mils DFT	285 sq ft/gal
1.75 mils DFT	245 sq ft/gal
2.0 mils DFT	215 sq ft/gal

THINNING:

For spray application with a conventional or HVLP gun, reduce with 1 – 3 fl.oz. of water to 18 – 23 seconds with a #2 Zahn Cup. In temperatures above 80° F. an additional 1 – 2 fl.oz. of **AT70 Retarder** will help film uniformity and gloss.

APPLICATION:

TriAqua is best applied with conventional or airless spray. HVLP is satisfactory but older guns may impart some orange peel and require more retarder to control dry spray. Air assist airless with fluid pressure above 1800 psi produce a good finish; older units with maximum fluid pressure of less than 1000 psi do not. Spray is the only recommended method of application, including touch up.

Conventional Spray: Pressure feed is recommended but only for convenience. Binks 2001Gun or equivalent, .030" – .040" fluid nozzle; air cap sized for available air. Use 25 – 30 psi material pressure; 60 – 65 psi air pressure.

Airless: Any +1/3 gpm pump with an .011 – .013 tip.

Use either a Binks Pre Orifice tip and 120 mesh tip filter in conjunction with a flat tip or a .012 Graco Fine Finish Tip. The Pre Orifice tip + flat tip is recommended for ease of maintenance. Tips larger than .013 do not work.

Air Assist Airless: 1500 – 1800 psi fluid pressure; .011 fluid tip, air pressure as necessary for fan desired. Use smallest amount of air possible.

HVLP: Use Binks 90 – 91 fluid nozzle, .020" – .030", fluid pressure as needed to produce a 6" fluid stream without any air.

Apply in two wet coats. The smoothness of the wet film is the same as the dry. Orange peel and dry spray will not "wet in" or flow out. Typically the gun must be closer to the part and a significantly wetter film applied. For optimum gloss the finish coat must be applied until the paint "puddles." Reduced as recommended above, the sag point is 4.0 – 4.5 wet mils over bare steel and well above 6 over itself as a second coat. An ideal film is one coat at 2 – 3 wet mils and a finish at 5 – 6. Below 4.0 wet mils, gloss will be compromised.

CLEANUP: Water
 Clean wet tools with water. Dried **TriAqua** can be cut with **AT17 Wash Thinner**.

Health & Safety**CAUTION:**

CAUSES IRRITATION. DO NOT INGEST. Contains 2-Butoxyethanol, CAS # 111-76-2, 2-Butanol, CAS # 78-92-2. Avoid contact with eyes and skin. Wash hands thoroughly after using and before eating and smoking. 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.**

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