



# TECHNICAL DATA SHEET

## TRI-DAR® 33, 44

### Linseed Oil Emulsion Compounds

03050

CONCRETE MATERIALS  
CONCRETE

TAMMS INDUSTRIES  
MAY 1999 (Replaces 4/95)

1. **DESCRIPTION:** TRI-DAR emulsions are patented, single application curing, sealing, and anti-scale compounds. Each forms a semi-permeable membrane to control moisture loss, aid hydration of cement, and ensure rapid development of both early and ultimate design strengths. TRI-DAR emulsions are spray applied directly onto the wet concrete surface to penetrate and help prevent surface or “map” cracking caused by premature drying. Approximately two hours following the application, the emulsion will “break” to allow the linseed oil to form a semi-permeable membrane that immediately protects the surface from rain, controls moisture loss, and aids in hydration. The surface is further protected from the scaling that results from the damaging effects of freezing and thawing when deicing chemicals are used.

- TRI-DAR 33/1 is a Nonpigmented General Purpose Curing and Sealing Emulsion.
- TRI-DAR 33/2 is a White Pigmented General Purpose Curing and Sealing Emulsion.
- TRI-DAR 44 series emulsions are formulated with a high viscosity heat bodied Linseed Oil for greater protection through 130 - 150 freeze- thaw cycles.
- TRI-DAR 44/1 is a Nonpigmented Extreme Service Curing and Sealing Emulsion.
- TRI-DAR 44/2 is a White Pigmented Extreme Service Curing and Sealing Emulsion.

2. **USES:** TRI-DAR 33/1, 33/2, 44/1, and 44/2 are formulated for use on all freshly placed concrete surfaces that will be exposed to deicing chemicals and salts. Typical surfaces include concrete roadways, bridge decks, runways, docks, dams, floors, sidewalks, prefabricated concrete barriers, also, parking structures, decks, ramps, and lots.

3. **COMPOSITION AND MATERIAL:** TRI-DAR curing and sealing compounds are linseed oil emulsions, and contain no aromatic solvents. Titanium dioxide is the white pigment used in TRI-DAR 33/2 and TRI-DAR 44/2. TRI-DAR 44/1 and TRI-DAR 44/2 are formulated with the addition of high viscosity heat bodied Linseed Oil (25,000 G-H Viscosity) for maximum moisture retention and greater concrete durability.

#### TECHNICAL DATA

Product	Specification	Percent Solids
TRI-DAR 33/1	ASTM C309* and	49± 1%
TRI-DAR 33/2	AASHTO M148*	49± 1%
TRI-DAR 44/1	ASTM C309* and	50± 1%
TRI-DAR 44/2	AASHTO M148*	50± 1%

TRI-DAR formulations meet requirements of ASTM C156 and AASHTO T-155 Test for Water Retention by Concrete Curing Materials.

- Compliance exception. The drying time will vary due to the nature of the material, porosity of the concrete, and atmospheric conditions.
4. **COLORS:** TRI-DAR 33/1 and TRI-DAR 44/1 appear milky white in the container and when sprayed, to provide visual identification. The emulsion “breaks” in approximately 2 hours to leave a clear, wet look.
- TRI-DAR 33/2 and TRI-DAR 44/2 are pigmented white to reflect sun and heat from the surface during the curing period. ASTM Reflectance Index: 60 percent minimum.
5. **MIXING INSTRUCTIONS:** Stir or agitate TRI-DAR emulsions thoroughly before use. Frequently agitate white pigmented TRI-DAR 33/2 and TRI-DAR 44/2, to ensure complete pigment suspension, greater water retention, and more uniform surface reflectance.
6. **APPLICATION TECHNIQUES:** Conventional hand power or boom type spray equipment capable of producing 75 to 90 psi is recommended for application.

TRI-DAR emulsions are especially suited for use on paving train equipment. Spray apply TRI-DAR emulsions as soon as the free water disappears from the surface. It is not necessary for all of the water sheen to leave surface before curing.

7. **COVERAGE:** For optimum curing, sealing, and anti-spall results, apply TRI-DAR emulsions at the maximum rate of 200 square feet per gallon (4.9 sq.m/l).

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8. **CLEAN-UP INSTRUCTIONS:** Clean tools and equipment with detergent and water immediately following use. Clean drips, splatters, or spills while the TRI-DAR emulsions are still wet. TRI-DAR emulsions become difficult to remove after they have dried.

9. **MAINTENANCE:** Apply TRI-DAR 66/1A to maintain the freeze-thaw protection of the concrete surfaces cured with TRI-DAR. TRI-DAR 66/1A should be applied after one or two years of severe winter weather following the application of TRI-DAR 33/1 or TRI-DAR 33/2 for curing.

TRI-DAR 66/1A should be applied after 3 to 5 years of severe winter weather following the application of TRI-DAR 44/1 or TRI-DAR 44/2 for curing.

For additional maintenance, apply TRI-DAR 66/1A every three to five years depending upon climate and chemical usage.

10. **CAUTIONS:** Do not dilute TRI-DAR emulsions.

Agitate TRI-DAR 33/2 and TRI-DAR 44/2 frequently to maintain uniform pigment suspension.

Do not use TRI-DAR on dense, highly troweled surfaces.

TRI-DAR cured surfaces may be opened to foot traffic in approximately 5 hours. Initial surface hardening will be slightly retarded for the first 24 - 48 hours, but will continue to increase beyond the 28 days.

Do not apply TRI-DAR emulsions to frozen or frost filled surfaces, or when the temperature is below, or expected to fall below 40°F (4.4°C) within 24 hours.

**KEEP AWAY FROM CHILDREN AND ANIMALS.**

11. **TECHNICAL SERVICE:** For application procedures or surface conditions not specified above, please contact:

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