



TECHNICAL DATA SHEET

TAMMSGROUT SUPREME

Heavy Duty Multiflow Grout

03600

GROUT
CONCRETE

TAMMS INDUSTRIES
MARCH 2002 (Replaces 1/00)

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- DESCRIPTION:** TAMMSGROUT SUPREME is a heavy duty, high early strength, nonshrink, nonstaining, ready-to-use grout. The multiflow characteristic enables this single product to be packed, rodded, vibrated, poured, or pumped. TAMMSGROUT SUPREME has high flexural and compressive strengths, and it is non-metallic, nonrusting, noncorrosive, and non-gas-forming. TAMMSGROUT SUPREME complies with Corps of Engineers Specification CRD-C 621, ASTM C827 and ASTM C1107.
- USES:** TAMMSGROUT SUPREME is used interior or exterior to grout large structural columns, heavy pump and machine bases, post tensioning cables, anchor bolts, precast "Tee" joints, bearing plates, and other similar applications.
- COMPOSITION AND MATERIAL:** TAMMSGROUT SUPREME is a proprietary formulation of modified cements and selectively graded aggregates. TAMMSGROUT SUPREME contains no chlorides, iron, or gas forming materials.

- COLORS:** Concrete gray color when dry.
- SURFACE PREPARATION:** Concrete surface must be structurally sound, clean, free of loose or deteriorated concrete, dust, dirt, and other contaminants. Steel or other surfaces must be clean and free of paint, dust, oil, rust, and other contaminants. Edges of concrete to be grouted that are less than 1 inch (2.5 cm) thick must be vertically cut to form a uniform butt. Smooth substrates must be abraded to ensure proper bonding. Shim and anchor support elements to prevent movement. Saturate prepared area with potable water for 12 to 24 hours minimum, before application. Remove excess water from holes and voids just before placement, to prevent dilution of the TAMMSGROUT SUPREME.
- FORMING:** Construct forms to provide for rapid and continuous grout placement. Provide venting or air relief openings to avoid air entrapment. Allow 1 inch (2.5 cm) for "head," and 1/2 inch (1.3 cm) for clearance. For pouring, allow a minimum 3 inch (7.6 cm) entry clearance, and a 6 inch (15.2 cm) "head." Seal wood forming surfaces to prevent absorption of moisture from the TAMMSGROUT SUPREME. Anchor forms tightly to prevent movement. Caulk to prevent moisture loss. Remove forms after final set, usually in 1-2 hours.

- MIXING INSTRUCTIONS:** TAMMSGROUT SUPREME requires only potable water for mixing. Use a rotary mixer with rubber tipped blades. Small quantities may be mechanically mixed using a slow speed motor and mixing blade. **Measure mixing water accurately.** Add the following measured amount of water to achieve the proper grout consistency:
 Plastic—3.25 - 3.5 qts. (3.1 - 3.3l)
 Flowable—3.5 - 3.75 qts. (3.3 - 3.6l)
 Fluid—4.25 - 4.5 qts. (4.0 - 4.3l)

With the mixer running, add water, and then, slowly add the bag of TAMMSGROUT SUPREME. Mix for 2-3 minutes to a smooth, even consistency. Place the grout within 5 minutes of mixing, to utilize the full benefit of the expansion process. Continue mixing additional batches as necessary to maintain a continuous grout flow into the forms. Do not mix more material than can be placed in 20 min. Do not retemper TAMMSGROUT SUPREME.

TECHNICAL DATA at 75°F				
TESTS, METHODS		CONSISTENCIES		
		PLASTIC	FLOWABLE	FLUID
Compressive Strength (ASTM C-109)				
1 Day	psi	7,094	6,510	4,314
3 Days	psi	9,356	7,245	6,541
7 Days	psi	10,856	9,688	7,968
14 Days	psi	11,863	10,565	8,355
28 Days	psi	13,210	11,510	9,410
Flow Table Percent (ASTM C-230)		110	140	N/A
Flow Cone Seconds (CRD-C 611)		N/A	N/A	27
Setting Time Minutes (ASTM C 191)				
Initial Set		12	27	35
Final Set		28	37	46
Expansion Percent (CRD-C 588)				
1 Day		0.051		
7 Days		0.057		
28 Days		0.057		
Compliance: Meets ASTM C827		Compliance: Exceeds Corps of Engineers CRD-C 621		

8. **APPLICATION TECHNIQUES:** Mix TAMMSGROUT SUPREME in sufficient quantities to ensure continuous flow at time of placement. Pack or pour grout to vent air and avoid air entrapment. Maintain a minimum 6 inch (15.2 cm) "head" of pourable grout mix, to allow for grout flow, proper filling, and air venting. TAMMSGROUT SUPREME may be pumped with a heavy duty progressive cavity or diaphragm type pump specifically designed for the purpose. Protect grout areas from sun and wind during hot weather, and use cool water for mixing. Warm water may be used during cool weather. TAMMSGROUT SUPREME normally achieves final set in 1-2 hours. Following final set, strip formwork and remove excess "head" and "clearance" grout. For fills deeper than 2 inches (5.1 cm), contact Tamms Technical Service Centers.

9. **CURING:** Immediately following form removal, cure the TAMMSGROUT SUPREME using standard ACI curing procedures. To prevent rapid water loss, apply a membrane curing compound such as Clearseal 150 or Std., or cover with wet burlap for 48 hours. No "Capping" is necessary.

10. **COVERAGE:** One 55 pound (24.9 kg) bag will yield approximately 0.5 cubic foot (0.014 cu.m.).

11. **CLEAN-UP INSTRUCTIONS:** Clean application tools and mixing equipment with water immediately after use.

12. **CAUTIONS:** Measure water accurately to prevent strength reduction. Do not use additives such as set retarders, set accelerators, or calcium chloride. Do not place TAMMSGROUT SUPREME when temperatures are below, or expected to fall below 35°F (1.7°C) within 72 hours. Do not retemper TAMMSGROUT SUPREME.

13. **ENVIRONMENTAL AND SAFETY PRECAUTIONS: Industrial Use Only.** Contains portland cement which is alkaline on contact with water. Irritating to eyes and skin. Avoid splashing into eyes or contact with skin. In case of eye contact, flood eyes repeatedly with potable water and call a physician or ophthalmologist immediately. **DO NOT RUB EYES.** Wash skin thoroughly after handling and before smoking or eating. Do not take internally. **KEEP AWAY FROM CHILDREN AND ANIMALS.** Consult Material Safety Data Sheet for further information. EMERGENCY RESPONSE PHONE NUMBER: (800) 862-2667 TAMMS OR (800) 424-9300 CHEMTREC.

WARNING:

- Contains free silica
- Do not breathe dust
- May cause delayed lung injury (Silicosis)
- International Agency for Research on Cancer (IARC) reports that there is limited evidence that Crystalline Silica may cause cancer in humans.
- Follow OSHA safety and health standards for crystalline silica (quartz)

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

TAMMS INDUSTRIES
3835 State Route 72,
Kirkland, IL 60146
800-862-2667
FAX: 815-522-2323
www.tamms.com

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