Super Diamond Glaze

1. PRODUCT NAME
Tenon® Super Diamond Glaze

2. MANUFACTURER
TCC Materials®
2025 Centre Pointe Blvd.
Mendota Heights, MN 55120 USA

Phone: 1.651.688.9116
Fax: 1.651.688.9164
Internet: tccmaterials.com

3. PRODUCT DESCRIPTION
Tenon® Super Diamond Glaze is a high–solids, low–viscosity, sprayable curing & sealing agent used to cure and seal exposed aggregate and seal colored concrete when an ultra high–gloss finish is desired with a single application. Made with a blend of 100% methacrylate polymers, this aromatic solvent–based coating does not yellow when exposed to the sun's UV rays and can also be used as a final sealer on burnish block, architectural concrete, brick, slate, paving stone, terrazzo, quarry tile, and cementitious materials. Super Diamond Glaze will enhance the beauty and vibrancy of colored or stamped concrete and exposed aggregate giving it a rich "wet–look" high–gloss finish. It forms a coating to increase protection from damaging freeze–thaw cycles, deicing salts, efflorescence, and chemical erosion, protects surfaces from most chemicals, dirt, acids, alkali, oil, grease, foods, and airborne pollutants while making these surfaces easier to clean.

Features and Benefits
- Color enhancing, darkens the color and adds high–gloss to the applied surfaces
- Non–staining, non–yellowing
- Ready to use (no diluting, gently stir, and use)
- Minimizes spalling and aggregate pops by penetrating into the surface of the concrete or exposed aggregate to fill gaps and voids
- Makes surfaces less dusty and easier to clean by resisting penetration of grease or rust stains on concrete surfaces
- Can be applied to new non–colored concrete as a curing compound, to reduce the loss of water during the hardening process
- Easy to apply with a sprayer, roller, or long–nap applicator
- Forms a coating to increase protection from damaging freeze–thaw cycles, deicing salts, efflorescence, and chemical erosion
- Protects surfaces from effects of rain water penetration, airborne pollutants, most chemicals, dirt, foods, acids, alkali, oils, salt, freeze –thaw, smog, and contaminants while making surfaces easier to clean.
- 2–hour drying time to be open to traffic under normal conditions
- Higher solids content provides increased abrasion resistance in traffic areas
- Wear patterns can be easily re–coated

Uses
- When high–gloss "wet–look" shine is desired
- Exterior applications, above grade
- Vertical or horizontal applications
- New or existing applications
- Final seal for concrete, architectural concrete, natural stone, paving stone, brick, burnish block, and other cementitious materials
- Also aids in curing new exposed aggregate and concrete

SAFETY
READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. SDS information is available on our website: tccmaterials.com or contact TCC Materials® at 651–688–9116 (7:30 AM to 4:00 PM Central US Time).

CAUTIONS
Read complete cautionary information printed on product container prior to use.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered Tenon® brand product (s) under normal environmental and working conditions. Because each project is different, neither Tenon® nor TCC Materials® can be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

Typical Results of Tenon® Super Diamond Glaze	
Composition and Materials	A blend of 100% methacrylate acrylic polymers in a fast–drying aromatic solvent. No fillers are used and there are no oils, waxes or saponifiable resins. Tenon® products are manufactured with only the finest quality raw materials available and close quality–control is practiced.
Percent Solids	30%
Flash Point	<100°F (<37°C)
Moisture Efficiency	Meets ASTM C–1315 when applied to 300 sq. ft. per gal. (Max. allowed 0.40 kg/m^2)

4. TECHNICAL DATA (Cont.)

Typical Results of Tenon® Super Diamond Glaze	
Typical Drying Time @ 70°F	1 hour (touch) 2 hours (traffic)
VOC Content	<700 g/l
A.I.M. Category	Curing and Sealing Compound Maximum VOC 700 g/l
Applicable Standards	ASTM C–1315, Type 1, Class A, B, and C at 300 sq. ft. per gal. ASTM C–309, Type 1, Class A, B and Type 1D with a red dye added. Fed. TT–C–800A, Type 1, Class 1 AASHTO Des. M–148, Type 1, Clear DE CRD— C300

Note: These dry times are dependent on normal drying condi–tions. Cool temperatures or high humidity will slow the drying time.

Packaging

- 1 gal. bottle (3.78 L) – Product #120836
- 5 gal. pail (18.93 L) – Product #120835
- 55 gal. drum (208 L) – Product #120837

Shelf Life

For best use, the recommended shelf life is 12 months. If shelf life is beyond 12 months, please contact your distributor. Store in a cool, dry location in the original labeled container, away from moisture, out of direct sunlight. DO NOT STORE NEAR HEAT OR OPEN FLAME. Keep containers tightly sealed when not in use.

5. INSTALLATION

Preparation

- Read all directions before starting work. Super Diamond Glaze must be stirred gently prior to use. Do not mechanically mix. Do not create bubbles by entraining air. Do not dilute. Read and understand SDS pages for safety precautions prior to use.
- For optimal performance, apply only to dry surfaces in order to not trap moisture between the film and the concrete slab, which can cause a white film to develop.
- Do not apply when rain is expected within 4–6 hours of application.
- Super Diamond Glaze will not freeze, however it must be allowed to warm to 50°F (10°C) prior to using.
- Remove all loose or unsound materials prior to application. Thoroughly clean surface of dirt, dust, oil, grease or other contaminants before using.
- Use only in well–ventilated areas.

New Concrete: Wash with a mild acid solution to remove dust residue and flush with clean water. Allow surface water to completely dissipate.

Colored Concrete: If used as a curing agent on freshly poured colored concrete, the color will be intensified with Super Diamond Glaze. It is recommended to only apply when the colored concrete has fully cured and the color looks uniform.

Existing Concrete: Repair any cracks or damaged areas. Surfaces must be clean, dry and free from oil, grease, dust, and curing compounds (especially wax based).

Paving Block, Patio Stone, Brick and Exposed Aggregate: Surfaces must be clean and dry to avoid trapping moisture.

Stamped Concrete: Proper washing is important, any abundance of oil from a liquid release agent can block adhesion of the Super Diamond Glaze. When using a powdered release agent, delaminating of the sealer may occur if the proper amount of release is not washed off the surface prior to sealer application.

Note: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

Job Mockups

The manufacturer requires that when its Tenon® products are used in any application or as part of any system that includes other manufacturers' products, the contractor and/or design professional shall test all the system components collectively for compatibility, performance and long–term intended use in accordance with pertinent and accepted industry standards prior to any construction. Written documentation of the tests performed shall be satisfactory to the design professional and contractor. Test results must include the means and methods of application, products used, project–specific conditions being addressed, and standardized tests performed for each proposed system or variation.

Mixing

- Mixture must be stirred gently prior to use. Do not mechanically mix. Do not create bubbles by entraining air.
- Do not dilute.

Application

- Apply only when air and substrate temperatures are between 40°F–100°F (4°C–38°C) and the Super Diamond Glaze is above 50°F (10°C). For best results, avoid application in direct sunlight.
- A first coat of Cure & Seal is recommended followed with a top coat of Super Diamond Glaze to improve the depth of protection.
- Apply with a low pressure sprayer, with roller, or with a short napped applicator at the rate of 200–500 sq. ft. per gal. Sprayers must be equipped with PVC, viton, or other compatible fittings and hoses as solvent can damage rubber fittings.
- Work Super Diamond Glaze into the concrete, avoiding pooling, runs or sags.
- Surface should have a uniform coating.
- Allow first coating to thoroughly dry prior to application if a second coating is needed.

Exposed Aggregate: Exposed aggregate requires application in 2 coats: a first thin coat to cure; the second heavier coat forms a clear film to enhance coloring and protect surfaces. When using as a curing compound, the surface should first be washed with a mild acid solution to remove the thin film of cement dust, then thoroughly rinsed and allowed to dry prior to application of a thin coating of Super Diamond Glaze. The final coat is applied once the exposed aggregate has fully cured.

Note: Super Diamond Glaze will darken the appearance of concrete, especially if it is applied too heavily. A small mock–up in an inconspicuous area is often done to test compatibility with the substrate prior to full application. When applying to existing areas surfaces must be clean and dry.

Cleaning

Use mineral spirits or solvent–based cleaners, such as xylene on tools and equipment. For skin contact, wash thoroughly with soap and warm water.

Limitations

- Super Diamond Glaze is not recommended for applications on freshly–poured colored concrete, asphalt, surfaces subject to hydrostatic pressure, or as a waterproofing agent for below–grade surfaces.
- Always stir gently prior to use. Do not mechanically mix or create bubbles by entraining air.
- Existing surfaces must be fully dry to not trap moisture between the film and the concrete slab, which can cause a white film to develop.
- Since it is a solvent–based sealer, keep away from heat and flame. Use only with sufficient ventilation, do not breathe vapor or mist, wear the appropriate properly fitted NIOSH/ MSHA approved respirator. Close container tightly after each use.
- Concrete mixes containing calcium chloride will remain dark longer when sealed. Some extenders and additives, such as fly ash for example, can create inconsistent porosity and coverage ratios will need to be adjusted to compensate for these variations.
- Popout or scaling issues can occur with any concrete installation, but are more likely in extreme hot weather conditions (above 90°F / 32°C), and when finished by heavy steel troweling. In certain regional areas a reaction between the silica in the shale particles and the sodium and potassium alkali in the Portland cement can increase the occurrence. It is not recommended Super Diamond Glaze be used as a curing compound when these conditions exist, however a seal coat can be applied for protection and dustproofing when the concrete is fully cured and dry.
- Some fumes may be present during application. Use best practices when applying on interiors for proper ventilation. Super Diamond Glaze is non–toxic in its cured state.
- Do not dilute with water or solvents.
- Allow sealer to warm to 50°F (10°C) before application.
- Dispose of contents/container in accordance with all local and state regulations.
- Keep out of reach of children.

Coverage

Note: Coverage is per coating and may vary due to porosity, wind, temperatures, and condition of surfaces.

Approximate Coverage @ 70°F (21°C)	Sq. Ft./Gal.	M^2 /L
Curing exposed aggregate	300–500	7.3–12.3
Second coat, cured concrete, burnished block	300–500	7.3–12.3

6. AVAILABILITY

To locate Tenon® products in your area, please contact:

Phone: 1.651.688.9116
Email: info@tccmaterials.com

7. WARRANTY

Seller warrants that its product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that Seller's liability to the Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.

8. MAINTENANCE

Minimal maintenance is required other than normal sweeping, dusting, or mopping. If wear patterns do occur, or if spillage removes the coating, reapply to the affected area. Reapplication is recommended every 3–5 years depending on application and usage.

9. TECHNICAL SERVICES

Technical Assistance:
Information is available by calling TCC Materials®
(hours 7:30 AM to 4:00 PM CST):

Phone: 1.651.688.9116
Email: info@tccmaterials.com
Web: tccmaterials.com

Technical and Safety Literature:
To acquire technical and safety literature, please visit our website at: tccmaterials.com.

10. FILING SYSTEM

Division 7 & 9

TCC MATERIALS
SPEC BLENDED CONSTRUCTION PRODUCTS®
TCC Materials
2025 Centre Pointe Blvd
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