

T-78 MMA POLYMER CRACK SEALER

T-78 MMA Crack Sealer is a very low viscosity, low surface tension, rapid curing methacrylate reactive resin system that is highly effective for sealing and filling cracks and pores in concrete structures.

APPLICATION PROCEDURE

Surface Preparation

Concrete surfaces that are to receive T-78 should be thoroughly clean and sound. Remove all surface dirt, grease, paint, rust, and other contaminants by sand blasting or shot blasting. Applications on LMC overlays do not require blasting or mechanical abrasion, the surface can be high pressure washed to remove contamination. Before application moisture content shall not exceed 6%, confirmed with non-destructive concrete moisture meter. The ambient temperature of the deck should be between 40°F-100°F / 4°C-38°C. For colder temperatures contact a Transpo representative.

Mixing

T-78 must be mixed with the appropriate amount of powder catalyst just prior to application. Air / substrate temperature determines the amount of powder catalyst used. Table 1 lists the appropriate amount of powder catalyst to be added to one gallon of T-78 resin. Using clean, dry, plastic buckets, scoops and a drill-mounted paddle mixer, add powder catalyst to T-78 and mix until dissolved (approximately one minute). Mixed T-78 must be used immediately.

Table 1: Mixing Instructions for Powder Catalyst per one gallon of T-78

Temperature °F / °C	Packets (30 g each)	Weight %
40 / 4	5	5
50 / 10	4	4
60 / 16	3	3
70 / 21	2	2
90 / 32	1	1

Application

T-78 is applied in a gravity-fed process. The rate of application of T-78 resin should be approximately 100-150 ft²/gal when flood-coating and 150-200 LF/gal when individually treating cracks. Both coverage rates will vary depending on the surface porosity, size, and quantity of cracks present in the area being treated.

Flood Coat Applications

Concrete surface should be flooded with the resin, allowing sufficient time for penetration into the surface and complete filling of all cracks. Excess material should be redistributed using squeegees or brooms within five minutes after application. The quantity of T-78 resin mixed at one time should be limited to five gallons.

Broadcasting of Aggregate

Broadcast sand should be applied to the entire treated area prior to cure, typically at 1-2 lb/yd². The sand used should be a clean and dry quartz, sieve size 12-20 or similar. It should be placed within five minutes of the resin application and before any setting of the resin occurs. Traffic can be restored once the concrete surface is cured tack-free. If line striping is to be applied after the application of T-78 the cured material on the concrete surface may need to be removed before application of the striping material.

Localized Crack Treatment

When treating cracks individually, the quantity of T-78 resin mixed at one time should be limited to one half-gallon. Mixed resin should be applied in a controlled manner, using clean and dry plastic squeeze bottles or similar. It is not necessary to broadcast aggregate when the substrate is not flooded with resin.

Table 2: T-78 Cure Times*

Temperature °F / °C	Cure Time* (min)
40 / 4	60-75
50 / 10	45-60
60 / 16	30-45
70 / 21	30-45
90 / 32	20-35

Table 3: Properties of T-78**

Property	Unit of Measure	Test Method
Appearance	Bluish Liquid	
Viscosity	<5-10 cps	ASTM D2556
Density	8.08lb/gal	ASTM D1475
Pot Life @ 70°F / 21°C	15-20 min	AASHTO T237
Tack Free Time @ 70°F / 21°C	30-40 min	AASHTO T237
Solids Content	100%	ASTM D1644
Tensile Strength	>3,500 psi	ASTM D638 Type I
Tensile Elongation	1-5%	ASTM D638 Type I
Slant Shear Strength (14 days)	2,200 psi (15.2 MPa)	ASTM C881

PACKAGING

T-78 comes in one, five and fifty-gallon containers. The powder catalyst is provided in separate labeled containers or in pre-measured quantities.

STORAGE

T-78 should be stored in tightly sealed containers in a cool, dry location, out of direct sunlight. Maximum storage temperature is 77°F / 25°C. Store materials in original containers.

CAUTION

T-78 is a flammable liquid in the uncured state. Read and understand product labels and SDS prior to use. T-78 may produce minor skin irritations to persons prone to such reactions. It is recommended that all persons involved in mixing and application wear protective clothing such as goggles, rubber boots, rubber gloves

*Cure times are approximate and will vary with ambient and deck temperature, humidity, and sunlight.

**The value ranges stated in this Technical Data Sheet are based on system processing under laboratory conditions. Equipment configurations and / or field application conditions may produce variances in final system values.

WARRANTY: The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product that proves to be defective. Neither seller nor manufacturer assumes any liability for injury, loss or damage resulting from use of this product.