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PRODUCT DATA SHEET
TECHCRETE™-R / TECHRETE™-TBR

PART NO. 34952 (Type R)
PART NO. 34953 (Type TBR)

AUGUST 2024

READ BEFORE USING THIS PRODUCT

GENERAL

TechCrete is gray in color, aesthetically suitable in all concrete pavements, and is used in sealing wide cracks and joints, and repairing a large variety of pavement distresses in Portland Cement Concrete Pavement and Asphalt Concrete Pavement. Pavement distresses appropriate for TechCrete include but are not limited to: A) Cracking (corner breaks, longitudinal and transverse cracking), B) Joint Deficiencies (spalling of longitudinal and transverse joints), C) Surface Defects (map cracking and scaling, pop-outs), and D) Miscellaneous distresses (blowups, faulting of transverse joints and cracks, lane-to-shoulder drop-off, lane-to-shoulder separation, and patch/patch deterioration). TechCrete is used in highway, street, road, parking lot, bridge decks, airport taxiways and runways, and other pavement surfaces. The unique design features of TechCrete produce an impervious, impact-resistant; load-bearing, flexible repair that withstands vehicle traffic, aircraft, movement and climatic conditions.

VOC = 0 g/l.

TechCrete-R ("TC-R") and TechCrete-TBR ("TC-TBR") are hot-applied, flexible mastic sealant compounds made of polymer-modified synthetic resin containing fibers, fillers, fines and high quality aggregate. TC-R and TC-TBR are supplied in powder / granular form in meltable bags. To use, bags of TC-R or TC-TBR are placed in an approved Melter (Crafcо Patcher I or II) where it is mixed and heated to the required installation temperature range. Heated TC-R or TC-TBR is then poured into the prepared pavement section and leveled as described in the Installation Instructions. The repair is then covered with Gray Surfacing Aggregate (Crafcо Part No. 33375SA) or a surfacing aggregate specified in the project plan and approved by Crafcо. The repair is allowed to cool and solidify prior to opening to traffic.

Read all information prior to using TC-R or TC-TBR: 1) Product Data Sheet, 2) Safety Data Sheet, 3) Installation Instructions, and 4) Patcher Equipment Safety Manual.

TechCrete is supplied as TechCrete-R and TechCrete-TBR.

Product	Recommended Use
TechCrete-R ("TC-R") Part Number 34952 Contains ideal pre-measured, pre-mixed combination of proprietary binder and fine aggregate designed to provide all the benefits of TechCrete. TC-R contains smaller aggregate than TC-TBR and is used in shallow repairs where neat edge feathering is required.	Wide Cracks and Joints TC-R is designed to treat wide cracks and joints with a minimum width of 1.5 inches (38 mm) and up to 4 inches (100 mm) wide and up to full-depth repairs. Surface Defects and Miscellaneous Distresses TC-R is designed for treating most other distresses as partial-depth repairs less than to 0.75 inch (20 mm) deep.
TechCrete-TBR ("TC-TBR") Part Number 34953 Contains ideal pre-measured, pre-mixed combination of proprietary binder and aggregate designed to provide all the benefits of TechCrete. TC-TBR contains larger aggregate than TC-R and is used in larger and deeper repairs- a minimum of 1.5-inch depth (38 mm) is required to install	Wide Cracks and Joints TC-TBR is designed to treat wide cracks and joints greater than or equal to 2 inches (50 mm) wide and up to full-depth repairs. Surface Defects and Miscellaneous Distresses TC-TBR is designed for treating most other distresses as partial-depth repairs from 0.75 to 8 inches (20 to 200 mm) deep, recognizing that the minimum application depth is 1.5 inches (38 mm). For deeper repairs, while not required, TechCrete-R & TBR can be bulked with additional aggregate - contact your Crafcо representative.

SPECIFICATION CONFORMANCE

Specification limits for TC-R and TC-TBR are as follows:

<u>PARAMETER</u>	<u>TechCrete-R</u>	<u>TechCrete-TBR</u>
Color	Gray	Gray
Form	Powder	Powder
Bulk Specific Gravity, g/cc @ 25 °C (ASTM D2726 Modified)	1.85-2.05 g/cc	1.93-2.18 g/cc
Binder Content (ASTM D6307 Method A), %	15 – 25	15 – 25
Aggregate Passing the 0.625 inch (ASTM D5444), % Retained on the No. 16, % Passing the No. 4 Sieve, %	-- -- 85 minimum	100 minimum 55 minimum --
Flow (ASTM D5329 Modified), 5 h 140 °F (60 °C), mm	5 maximum	5 maximum
Tensile Test (Briquette) (AASHTO T140 Modified TTM5) at 20 °F (-7 °C), 3 specimens, pounds.	100-250 (445 – 1112 N) at least 2 out of 3 fail between grips	50 – 220 (222 – 979 N), at least 2 out of 3 fail between grips
Tensile Adhesion, (ASTM D5329 Modified), psi (kPa)	12 psi (83 kPa) minimum, 0.15 inches (4 mm) minimum elongation	12 psi (83 kPa) minimum, 0.5 inches (12 mm) minimum elongation
Impact Testing (ASTM D2794 Modified, 2-inch (50 mm) diameter, 1 inch (25 mm) thick specimen, 0.625-inch (16 mm) impact dart	No cracking, chipping, or separation at 6 ft·lb (8.1 N·m) at 20 °F (-7 °C)	No cracking, chipping, or separation at 6 ft·lb (8.1 N·m) at 20 °F (-7 °C)
Flexibility, Lab Standard Conditions (ASTM D3111)	No Cracking or Loss of Aggregate Adhesion	No Cracking or Loss of Aggregate Adhesion
Minimum Application Temperature	330 °F (166 °C)	330 °F (166 °C)
Maximum Heating Temperature	400 °F (204 °C)	400 °F (204 °C)
Shelf Life	2 years	2 years

INSTALLATION

Prior to use, the user must read and follow Installation Instructions for TC-R or TC-TBR to verify proper product selection, heating methods, pavement preparation procedures, application geometry, usage precautions and safety procedures. These instructions are provided with each shipment.

PACKAGING

TC-R and TC-TBR are packaged in meltable bags each containing approximately 35 +/- 2 lbs. (15.8 +/- 1 kg) of product. Bags are stacked and stretch wrapped on pallets containing approximately 2700 lbs. (1225 kg). Pallets are weighed and the product is sold by net weight. Each 35 bag of TechCrete R fills a void ~ 0.27-0.39 cubic feet (0.008-0.011 m³). Each pallet of TechCrete R fills a void ~ 21-30 cubic feet (0.59- 0.85 m³). The amount of material used to fill the void will vary depending on amount of structural aggregate used. Each 35 lbs. bag of TC-TBR fills a void ~ 0.28 cu ft (0.008 cu m). Each TC-TBR pallet fills a void ~21 cu ft (0.59 cu m).

WARRANTY

CRAFCO, Inc. warrants that CRAFCO products meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing or filling are beyond our control as are the use and application of the products; therefore, Crafco shall not be responsible for improperly applied or misused products. Remedies against Crafco, Inc., as agreed to by Crafco, are limited to replacing nonconforming product or refund (full or partial) of purchase price from Crafco, Inc. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by Crafco, Inc. whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow Crafco recommendations for product installation.**