3719 HOT-POURED, CRUMB-RUBBER TYPE CRACK SEALER

3719.1 SCOPE

Provide hot-poured, crumb-rubber type crack sealer for sealing cracks in concrete and bituminous pavements and miscellaneous structures.

3719.2 REQUIREMENTS

Provide crack sealer material meeting the following requirements:

- (1) On the Approved Products List,
- (2) Consists of asphalt and crumb rubber blended together by the manufacturer to produce a homogeneous mixture,
- (3) When melted, the sealer does not separate or settle, and
- (4) Uniform consistency suitable for filling joints and cracks without inclusion of large air holes or discontinuities.

A Physical Requirements

Provide crack sealer meeting the requirements of ASTM D 6690, Type I with the following modifications in Table 3719-1 after one cycle of heating to the manufacturer's maximum heating temperature, cooling, and reheating to the manufacturer's maximum heating temperature.

Table 3719-1 ASTM D 6690, Type I Modifications	
Test	Specification
Recycled rubber, mass	≥ 18% of asphaltic components
Bond Test, 50% extension at 0° F [-18° C]*	No adhesion or cohesion bond failure after
	5 cycles
Resilience at 77° F [25° C]	≥ 40%
Softening point	≥ 180 °F [82° C]
* Use sawed cement mortar blocks or asphalt HMA blocks prepared using the method found in the MnDOT Laboratory Manual.	

B Packaging and Marking

Package and ship the sealer material in boxes weighing no greater than 50 lb [23 kg]. Mark the boxes with the following information:

- (1) Material name,
- (2) Manufacturer name,
- (3) Brand name,
- (4) Weight,
- (5) Batch number, and
- (6) Maximum heating temperature recommended by the manufacturer.

3719.3 SAMPLING AND TESTING

A Sampling

Provide samples at rates and sizes meeting the requirements of the Schedule of Materials Control or as required by the contract.

The Materials Engineer will perform tests on samples taken from the product proposed for use. Submit to the Engineer a manufacturer's Certificate of Compliance for each sealer batch.

B Methods of Test

Perform tests meeting the requirements of ASTM D 5329, except, perform the bond test using sawed cement mortar blocks or asphalt HMA blocks (consistent with the pavement type) prepared in accordance with the methods in the Laboratory Manual.