

## 3725 HOT-POURED, EXTRA LOW MODULUS, ELASTIC TYPE JOINT AND CRACK SEALER

### 3725.1 SCOPE

Provide hot-poured, extra low modulus, elastic type joint and crack sealer to seal joints in concrete pavement, bridges, other structures and rout and seal applications on bituminous pavements.

### 3725.2 REQUIREMENTS

Provide a sealant material meeting the following requirements:

- (1) Listed on the MnDOT Approved Products List,
- (2) Composed of a combination of polymeric materials, fully reacted chemically to form a homogeneous compound,
- (3) When melted, ensure the sealant does not separate or settle, and
- (4) Maintains a uniform consistency to seal joints and cracks without inclusion of large air holes or discontinuities.

#### A Physical Requirements

Provide sealant meeting the requirements of ASTM D 6690 Type IV with the following modifications in Table 3725-1.

Table 3725-1 ASTM D 6690 Type IV Modifications	
Test	Requirement
Cone Penetration at 77° F [25° C], ASTM D 5329	100 – 150 dmm
Cone Penetration at 0° F [-18° C], ASTM D 5329 modified	≥ 25 dmm
Resilience, ASTM D 5329	30% – 60%
NOTE: Ensure the material meets the requirements of Table 3725-1 after heating for 6 h with constant mixing in a laboratory melter at the manufacturer's maximum heating temperature.	

#### B Packaging and Marking

Package and ship the sealant 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.

### 3725.3 SAMPLING AND TESTING

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 with each sealant batch.

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 using the methods found in the Lab Manual.