

## Criteria for Acceptance of Liquid Anti-stripping Asphalt Additives for 2023 NS Department of Public Works Hot/Warm Mix Paving Projects

### A: For All Products

#### 1. Administrative

- a. Available for sale in Canada
- b. All ingredient and specification information supplied as requested, including information which is regarded as trade secret or confidential business information (under a confidentiality agreement, if necessary)
- c. Complete and adequate Safety Data Sheet (SDS), meeting all Canadian Workplace Hazardous Materials Information System (WHMIS 2015) requirements. Note that this requirement also applies to any product that does not contain an ingredient that would normally trigger WHMIS classification criteria. Where all ingredient information is not fully disclosed (i.e.: listed as trade secret or confidential business information) the SDS must be reviewed by the Hazardous Materials Information Review Bureau of Health Canada and must be issued with a Trade Secret Registry Number
- d. Sample of the formulation provided

#### 2. Physical Characteristics

- a. Non-volatile formulation (no low boiling components)
- b. Low odour formulation

#### 3. Toxicological Characteristics

- a. No ingredient with long term health effects, such as carcinogenicity, reproductive toxicity or lasting effect on any organ system
- b. No ingredient which is a primary lung sensitizing agent
- c. Overall formulation must be non-corrosive
- d. Overall formulation must be low irritant
- e. For formulations using a solvent to "cut" the final formulation, that solvent must be low toxicity

### B: For Formulations Containing Amines:

In addition to the criteria for approving all anti-stripping asphalt additives listed above, additional criteria are in place for evaluating amine-based formulations:

#### 1. Additional Toxicological Characteristics

- a. No low molecular weight amines (e.g. EDA, DETA, MEA) in final formulation
- b. No low molecular weight amines used as raw materials in preparing the formulation unless excess (unreacted amine) raw material is removed from the final formulation
- c. No primary amines in the final formulation
- d. Preference given to derivatized or substituted amines (e.g. ethoxylated)