



Minnesota Department of Transportation
Approved Form Release Agent Program
October 22, 2019

The Minnesota Department of Transportation (MnDOT) will only accept form release agents from the MnDOT Approved/Qualified Products List. This applies to all form release agents sold to contractors for use on MnDOT projects.

For a form release agents to be approved by MnDOT, a Manufacturer must demonstrate an ability to manufacture release agents meeting the requirements of MnDOT Specification 3902. The form coating material shall not penetrate or stain, or leave residual film on the concrete surface; shall not attract dirt or deleterious matter.

The Manufacturer must comply with the following:

A. Reference Samples

Manufacturer shall submit a 1 pint sample for approval to the MnDOT Materials Lab. Also include a Materials Safety Data Sheet (MSDS) and a Technical Data Information Sheet. A letter certifying that the form release compound meets the EPA's current VOC standards as well as stating the actual VOC content of your product.

B. Laboratory Acceptance

The product will be tested for flash point according to MnDOT spec 3902 as well as a demonstration of satisfactory (non-stick) form release characteristics in a laboratory specimen.

C. Environmental Acceptance

The product will be evaluated by the MnDOT Office of Environmental Stewardship Hazardous Evaluation Process (HEP) for concrete form release agents. MnDOT is now favoring form release products that are simpler compositions (fewer components) and more vegetative in nature. Due to increased concern about form release chemicals potentially entering surface waters in Minnesota, this change in direction away from petroleum based products is in response to that concern.

The EPA Safer Choice Ingredients List (<https://www.epa.gov/saferchoice/safer-ingredients>) is a good source of ingredients that would be favored in form release products. Detailed information about the Safer Choice Criteria can be found at <https://www.epa.gov/saferchoice/safer-choice-master-criteria-safer-chemical->

[ingredients](#). See the attached HEP for Concrete Form Release Agents for information that must be submitted before the product will be evaluated.

D. Non-Compliance

If future samples of these materials do not meet MnDOT specifications the product may be removed from the approved product list and subject to other failing material procedures.

Please also note that it is the manufacturer's responsibility to immediately notify MnDOT if the chemical formulation of any product is changed or modified, or if the product is no longer being produced. If our testing determines that the chemical formulation has changed, without prior notification from the manufacturer, the product may be removed from the approved product list.

The list of approved products may be found on the MnDOT Concrete website at <http://www.dot.state.mn.us/products/concrete/formreleaseagents.html>

Reference samples, test data, and certification shall be sent to:

Minnesota DOT
Attention: MnDOT Concrete Engineering Unit
1400 Gervais Ave.
Maplewood MN 55109

MnDOT Office of Environmental Services
Hazardous Evaluation Process
Concrete Form Release Agents Only

The MnDOT Office of Environmental Stewardship developed the Hazard Evaluation Process (HEP) as a tool to determine potential environmental impacts that could result from use of a product, and consequently, if the product is acceptable for use on MnDOT infrastructure. The following information must be submitted by the vendor in order for MnDOT to complete the HEP:

1. Vendor information
 - a. Name of Company
 - b. Address
 - c. Technical Contact Name and Telephone Number
 - d. Application Date
 - e. Product Trade Name
 - f. Product Chemical Name
 - g. Product Data Sheet

2. Provide Material Safety Data Sheets for all chemicals in the product material. Chemical component identifications must include Chemical Abstracts Service (CAS) registry numbers.

3. Metals analysis to include the eight RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) plus copper and zinc. Metals should be analyzed by EPA method 6010 or 6020 on the product as purchased. Total metal concentrations should be reported as mg/L in the final product. The lab report should include Quality Assurance sample results of laboratory blanks, duplicates, and spike recoveries.

Questions regarding the MnDOT Hazard Evaluation Process can be sent to:
Brian.kamnikar@state.mn.us or call 651-366-3617.