

HOW TO USE THIS DOCUMENT:

This document sets the minimum requirements for environmentally preferable sealants purchased by the State of Maryland used in the construction and maintenance of pavement surfaces, including roadways, driveways, parking lots, and sidewalks. Vendors are required to follow and, when possible, go beyond these standards in their product offerings to the maximum extent practicable when such products are cost competitive and meet form, function and utility requirements.

For State procurement officers, this document outlines the legislation, statutes, and regulations that mandate State purchasing practices for safer sealants. The document also provides boilerplate language to be included in State procurement contracts associated with sealants.

PRODUCTS COVERED UNDER THIS SPECIFICATION:

Acrylic Sealants

Asphalt-Emulsion Sealants

Asphalt Additives

Asphalt Release Agents

Bio-based Sealants

Chip Seals

Fog Sealers

Polyurethane Sealants

Silicone Sealants

Slurry Seals

Tack Coats

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1. ENVIRONMENTALLY PREFERABLE PURCHASING: LEGISLATION, STATUTES, AND REGULATIONS

For Procurement Officers and Agencies

Environmentally Preferable Purchasing (COMAR: [21.11.07.09](#))

“All procurement agencies shall purchase environmentally preferable products and services unless purchasing environmentally preferable products and services would limit or supersede any requirements under any provision of law or result in the purchase of products and services that:

- (1) Do not perform adequately for the intended use;
- (2) Exclude adequate competition; or
- (3) Are not available at a reasonable price in a reasonable period of time.”

Mercury and Products that Contain Mercury (COMAR: [21.11.07.07](#))

“All procurement agencies shall give a preference under this regulation to procuring products and equipment that are mercury-free. If mercury-free products and equipment that meet the agency's product performance requirements are not commercially available, the procurement agency shall give preference under this regulation to products containing the least amount of mercury necessary to meet performance requirements.”

For Contractors, Bidders, and Offerors

Verifying Environmental Claims (State Finance and Procurement Article [§14-410](#))

“A bidder or offeror for a procurement contract shall certify in writing that any claims of environmental attributes made relating to a product or service are consistent with the Federal Trade Commission’s Guidelines for the Use of Environmental Marketing Terms.”

Limitations and Prohibitions on Heavy Metals in Packaging (Environment Article [§9-§1902\(a\)-\(d\)](#))

A manufacturer or distributor may not sell or offer for sale or for promotional purposes any package or packaging component or any product in a package or packaging component to which any of the following was intentionally added during manufacture or distribution: (1) Lead; (2) Cadmium; (3) Mercury; or (4) Hexavalent chromium.

The sum of the concentration levels of lead, cadmium, mercury, and hexavalent chromium incidentally present in a package or packaging component may not exceed...100 parts per million by weight or 0.01%.

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Tin plated steel that meets the American Society for Testing and Materials Specification A-623 shall be considered a single packaging component.

On or after January 1, 2024, a manufacturer or distributor may not manufacture or knowingly sell, offer for sale, or distribute for sale or use in the State a food package or food packaging component designed and intended for direct food contact to which PFAS chemicals were intentionally added.

Limitations on Hazardous Substances (Environment Article [§6-1202](#))

“A person may not manufacture, process, sell, or distribute in the State a new product or flame-retardant part of a new product that contains more than one-tenth of 1% of pentaBDE (pentabrominated diphenyl ether) or octaBDE (octabrominated diphenyl) by mass.”

Environment – Sealant Products – Safer Sealants Act of 2022 (Environment Article [§9-2401 – 2405](#))

The statutes above –

- (a) Prohibit a person from supplying, selling, or offering for sale a high-PAH (polycyclic aromatic hydrocarbons) sealant product for application to a driveway or parking area in the State.
- (b) Prohibit a person from applying or soliciting the application of a high-PAH sealant product to a driveway or parking area in the State.
- (c) Establish a civil penalty up to \$2,500 for each violation and an administrative penalty up to \$2,500 for each violation, but not exceeding \$100,000 total.

2. PROHIBITED PRODUCTS

- A. Pursuant to Environment Article (Env’t) [§9-2403](#), the supply, sale, or offer of a sealant product applied to driveways and parking areas containing more than 1% of polycyclic aromatic hydrocarbons (PAH) by weight is prohibited.
- B. Pursuant to Env’t, [§9-1902](#), the Contractor is prohibited from offering or using packaging or packaging components (e.g. inks, dyes, pigments, adhesives, stabilizers, and additives) with lead, cadmium, mercury or hexavalent chromium at concentration levels exceeding 100 parts per million by weight or 0.01%.
- C. Pursuant to Env’t, [§6-1202](#), new products or flame-retardant parts of new products containing more than one-tenth of 1% of pentaBDE or octaBDE by mass are prohibited.

3. MINIMUM REQUIREMENTS FOR SEALANT PRODUCTS

The following minimum requirements apply to sealant products used for the construction and maintenance of pavement surfaces, including roadways, driveways, parking lots, and sidewalks.

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This includes asphalt emulsions, tack coat sealants, chip sealing emulsions, slurry seals, and fog sealing.

A. Sealants, *General*

1. All sealant products must not contain more than 0.1% PAH by weight.
2. Sealants must adhere to the [EPA 8270C](#) testing requirements for levels of PAH, **AND** the [EPA method 24](#) for volatile organic compounds (VOCs) in surface coatings.
Bidders must provide a certified test report conducted by a third -party entity that verifies the PAH and VOC content meets the requirements of this specification. Find a listing of accredited labs [here](#).
3. All sealant products must be listed by the Maryland Department of Transportation Office of Materials Technology (OMT) as a qualified product.
4. Sealants must comply with county PAH restrictions according to the [US Coal Tar and High PAH Sealant Bans and Government Restrictions](#).

B. Asphalt Emulsions

1. Emulsified asphalts must be listed by MDOT as a qualified product.
Find MDOT approved asphalt emulsion products [here](#).
2. Must comply with the ASTM D244 standard.

C. Tack Coats

1. Must be a qualified tack coat listed in the MDOT OMT Qualified Products and Producers.
Find MDOT approved tack coat products [here](#).
2. Must not contain more than 0.25% VOCs by weight.
3. Tack coats must not be diluted.

D. Asphalt Additives

1. Must be an asphalt additive listed in the MDOT OMT Qualified Products and Producers list.
Find MDOT approved binder additive products [here](#).
Find MDOT approved mixture additive products [here](#).

E. Asphalt Release Agents

1. Must be an asphalt release agent listed in the MDOT OMT Qualified Products and Producers list.

Find MDOT approved asphalt release agents [here](#).

4. MINIMUM REQUIREMENTS FOR SEALANT PRODUCTS USED FOR BUILDING CONSTRUCTION

The following minimum requirements apply to sealant products used for interior and exterior building construction, including waterproofing, damp proofing, masonry, glass and wood panels, curtain walls, roofs slabs, and floor slabs.

A. Sealants, *General*

1. Sealant products used for commercial building construction and maintenance must be certified to meet the applicable International Code Council (ICC) standards. The vendor must obtain documentation of third-party lab test results from the sealant manufacturer and include that documentation in its bid submission.
2. Sealant products used for damp proofing or waterproofing must be listed by MDOT as a qualified product.
Find MDOT approved sealants for damp proofing and waterproofing [here](#).
3. For products that have an environmental certification, bidders must provide links in their bid submissions to the certifier's website, the [Ecomedes](#) website, the UL Spot database, **OR** submit documentation of valid certification with their bids.
4. For products that have an Environmental Product Declaration (EPD) or Health Product Declaration (HPD), the bidder must include that EPD or HPD as documentation in its bid submission.
5. All sealants, caulks, foams and adhesives **must not contain** the following chemicals:
 - a. Formaldehyde;
 - b. Ethylene glycol;

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- c. Isocyanates;
- d. Dibutyl phthalate;
- e. Butyl benzyl phthalate; and
- f. Bisphenol A (BPA).

B. Silicone Sealants

1. Must have one of the following certifications:
 - a. UL Ecologo
 - b. UL Greenguard
 - c. UL Greenguard Gold

To verify compliance with the required certifications listed above, bidders must provide links in their bid submissions to the certifier's website, the [Ecomedes](#) website, the UL Spot database, **OR** submit documentation of valid certification with their bids.

2. For interior applications, silicone sealants must be water-based and have a Volatile Organic Compound (VOC) concentration below 50g/L.

C. Polyurethane Foam Sealants

1. Must have one of the following certifications:
 - a. UL Ecologo
 - b. UL Greenguard
 - c. UL Greenguard Gold
 - d. SCS Indoor Advantage Gold;

OR

 - e. An Environmental Product Declaration (EPD) or Health Product Declaration (HPD).

To verify compliance with the required certifications listed above, bidders must provide links in their bid submissions to the certifier's website, the [Ecomedes](#) website, the UL Spot database, **OR** submit documentation of valid certification with their bids.

2. Must not contain formaldehyde.

D. Acrylic Sealants

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1. For interior applications, acrylic sealants must be water-based and have a Volatile Organic Compound (VOC) concentration below 50g/L.

5. ENVIRONMENTALLY PREFERABLE PRODUCT RECOMMENDATIONS

A. Sealants, *Roadway Construction and Maintenance*

The State of Maryland encourages procuring agencies to consider requesting sealant products used for roadway construction and maintenance that include one or more of the following attributes:

1. Free of PAH
2. Bio-based , derived from renewable materials(such as soybean oil)
3. Possess an Environmental Product Declaration (EPD) or Health Product Declaration (HPD).

To verify compliance with the required certifications listed above, bidders must provide links in their bid submissions to the certifier’s website, the [Ecomedes](#) website, **OR** submit documentation of valid certification with their bids.

B. Sealants, *Building Construction*

When applicable, the State recommends procuring agencies request sealants for building construction that:

1. Are water-based sealants as opposed to solvent-based, especially for damp applications.
2. Do not emit VOCs.
3. For acrylic sealants, possess an Environmental Product Declaration (EPD) or Health Product Declaration (HPD).
4. Have no added biocides or additives for mold and mildew prevention.

6. ENVIRONMENTALLY PREFERABLE PURCHASING LANGUAGE

Instruction to Procurement Officers: Please include the following language to your solicitation if it does not already exist.

A. On Environmentally Preferable Purchasing:

The State of Maryland is committed to purchasing environmentally preferable products and services (EPPs). Maryland’s State Finance & Procurement Article §14-410 defines environmentally preferable purchasing as “the procurement or acquisition of goods and services that have a lesser or reduced effect on human health and the environment when compared with competing goods or services that serve the same purpose.”

Accordingly, Bidders/Offerors are strongly encouraged to offer EPPs to fulfill this contract, to the greatest extent practicable.

B. On Maryland’s Green Purchasing Reporting Requirements:

The State of Maryland requires, at a minimum, from the Contractor annual sales data over the life of this contract; the State also reserves the right to request quarterly sales data over the life of this contract.

The report shall include, at a minimum, details about the third-party sustainability certifications and other environmental attributes of products and services sold on this contract per the contract specifications.

To facilitate consistent reporting on this contract, the Contractor will be provided with a VENDOR GREEN SALES REPORT template from the Green Purchasing Committee (GPC), the Office of State Procurement (OSP) or the Department of General Services (DGS).

C. On Environmental Claims

All environmental benefit claims made by the Contractor concerning products or services offered on this contract must be consistent with the [Federal Trade Commission’s Guidelines for the Use of Environmental Marketing Claims](#).