

Environmental Regulations and Their Impact on STONETECH Brands (USA) TDS 281

Volatile Organic Compounds (VOCs) are substances that participate in atmospheric reactions, or off-gassing, in the presence of ultraviolet light to form ground-level ozone and other compounds. These reactions have wide-ranging effects in that they contribute to smog formation, which can affect human health, corrode buildings and machinery, and damage crops. Some individual volatile organic compounds are a threat to human health and others have a tendency to persist in, and migrate with, ground-water to drinking-water.

As they have become essential ingredients in many products and materials, organic chemical compounds are everywhere in both indoor and outdoor environments. The main concern indoors is the adverse impact on human health, and while VOCs can also be a health concern outdoors, the bigger concern is their ability to create smog. It is this concern and the desire to prevent the formation of ozone, a constituent of smog that drives the extensive regulation of VOCs.

STONETECH® products are impacted by over **60** VOC regulations in dozens of U.S. jurisdictions, in addition to VOC regulations in Canada and Hong Kong. Within the U.S. there are 7 regulatory entities: one federal and six state/local commissions. The Environmental Protection Agency (EPA) regulates VOCs at the federal level and Lake Michigan Air Directors Consortium (LADCO^), Ozone Transport Commission (OTC*), South Coast Air Quality Management District (SCAQMD), California Air Resources Board (CARB), Utah, and Maricopa County, Arizona regulate VOCs at the state/local level.

At the federal level, STONETECH products are subject to the emission standards for Architectural Coatings, EPA Rule 40 CFR Part 59. The EPA defines a coating as any "material applied onto or impregnated into a substrate for protective, decorative, or functional purposes." Products subject to the federal coatings rule must comply by meeting imposed VOC limits, paying an exceedance fee and/or using an annual tonnage exemption if they exceed imposed limits. At the state and/or local level, the STONETECH, PAVER ARMOR PRO and Stone Care product lines are subject to the emission standards for Architectural Coatings and Consumer Products. A consumer product is defined as "any household or institutional product, or substance, or article held by any person, the use, consumption, storage, disposal, destruction, or decomposition of which may result in the release of VOC." Products subject to the state coatings rules must comply by meeting the imposed limits. There is no allowance for exceedance fees or tonnage exemptions at the state and local level, however, products exceeding the imposed VOC limit may be sold under small container exemption in the regulated states — a small container is 1 liter (33.8 oz.) in size or smaller. Products subject to the state consumer products rules must comply by meeting the imposed limits; there are **no** fees or exemptions allowed for consumer products.

State and local regulatory entities often impose stricter limits than the EPA in addition to using different category definitions, it is important to note that products sold into these regions must comply with **both** the EPA and applicable local regulations if they are to be compliant. For example, one of the biggest differences between federal and state regulations is the allowance of Low Solids Coatings at the state and local level. The federal method of calculating VOC is to exclude all water from the calculation. The method was originally developed for paints to prevent a coating manufacturer from lowering the apparent VOC content of a paint by diluting the paint with water (therefore lowering the grams of VOC per liter of paint) and having the user apply more paint to compensate for the lower coating solids (and therefore releasing the same total amount of VOC as with the original higher solids paint). VOC content calculated using this method does not change regardless of how much water is added to the coating, and is useful for paints and coatings, but presents a challenge for water-based coatings which have relatively low levels of

solids and VOC. California and the 'OTC' states recognized that the "excluding water" method unfairly gives extremely high VOC content values for water-based coatings with low solids, even though these coatings often have very low VOC levels. Based on this recognition, California and the OTC states created a special category for "Low-Solids Coatings" (coatings with less than 1 pound of solids per gallon of product). This new category allows for a different way of calculating VOC content and a different VOC limit than for other types of coatings by including water in the calculation. The EPA has never modified their Architectural Coatings regulation to accommodate the majority of Low Solids Coatings (i.e. water-based penetrating sealers).

Water-based penetrating sealers are subject to federal VOC limits based on VOC content <u>excluding</u> water, and state and local limits based on VOC content <u>including</u> water, so long as they meet the requirement of a Low Solids Coating. In addition to states recognizing Low Solids Coatings as a VOC category, the SCAQMD Rule 1113 was amended to allow for Low Solids Coatings to be used to help attain LEED points. The VOC limit for Low Solids Coatings LEED v4 Credit Low Emitting Materials is 120 g/L <u>including</u> water. LATICRETE® Tile and Stone Installation, Masonry Veneer Installation System (MVISTM), and LATICRETE® SUPERCAP® products are not subject to these VOC regulations.

Beyond the USA, STONETECH products are subject to the emission standards for Architectural Coatings in Canada and both Architectural Coatings and Consumer Products in Hong Kong. For regulations in Canada, please refer to TDS 283 "Environmental Regulations and Their Impact on STONETECH Brands (Canada). In Hong Kong, regulated products must comply with the imposed VOC limits as there are no allowable exemptions.

*OTC states include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia and Washington DC.

The following are restrictions in place at the time of updating this document. This information is based on our current knowledge of the subject that LATICRETE believes to be reliable and is based on the product sizes as shown below. However, LATICRETE makes no warranties express or implied as to its accuracy or validity at the present time. It is the responsibility of the user to take the necessary additional measures to ensure that uses of the product(s) comply with all applicable regulatory requirements.

Item Number	Description	Packaging	State Restrictions	County Restrictions (State)	City Restrictions (State)
ST304-0401 ST304-0105	STONETECH® Enhancer Pro TM Sealer	1 gal. (3.8 L) 5 gal. (19 L)	(a)	(b)	(c)
ST308-0401 ST308-0105	STONETECH Heavy Duty Exterior Sealer	1 gal. (3.8 L) 5 gal. (19 L)	(a)	(b)	(c)
ST317-0401 ST317-0105	STONETECH Impregnator Pro® Sealer	1 gal. (3.8 L) 5 gal. (19 L)	(a)	(b)	(c)
ST439-0624-10	STONETECH DeepKlenz TM Cleaner	24 oz. (710 mL)	(e)	(d)	None

While product sizes listed above are restricted, smaller sizes are available for sale. Consult LATICRETE Customer Service for alternative sizes.

(a) includes Colorado, Connecticut, Delaware, Illinois, Indiana, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Washington DC

[^] LADCO states include Illinois, Indiana, Michigan, Ohio, and Wisconsin

- (b) includes Maricopa County (AZ), Alameda County (CA), Butte County (CA), Colusa County (CA), Contra Costa County (CA), El Dorado County (CA), Fresno County (CA), Imperial County (CA), Kern County (CA), Kings County (CA), Los Angeles County (CA), Madera County (CA), Marin County (CA), Merced County (CA), Monterey County (CA), Napa County (CA), Orange County (CA), Placer County (CA), Riverside County (CA), Sacramento County (CA), San Bernardino County (CA), San Benito County (CA), San Diego County (CA), San Francisco County (CA), San Joaquin County (CA), San Luis Obispo County (CA), San Mateo County (CA), Santa Barbara County (CA), Santa Clara County (CA), Santa Cruz County (CA), Shasta County (CA), Solano County (CA), Sonoma County (CA), Stanislaus County (CA), Sutter County (CA), Tehama County (CA), Tulare County (CA), Ventura County (CA), Yolo County (CA), Yuba County (CA), Box Elder County (UT), Cache County (UT), Davis County (UT), Chesterfield County (UT), Salt Lake County (UT), Tooele County (UT), Utah County (UT), Weber County (UT), Arlington County (VA), Botetourt County (VA), Charles City County (VA), Chesterfield County (VA), Fairfax County (VA), Frederick County (VA), Gloucester County (VA), Hanover County (VA), Henrico County (VA), Isle of Wight County (VA), James City County (VA), Loudoun County (VA), Prince George County (VA), Prince William County (VA), Roanoke County (VA), Stafford County (VA), Spotsylvania County (VA), York County (VA)
- (c) includes Alexandria City (VA), Chesapeake City (VA), Colonial Heights City (VA), Fairfax City (VA), Falls Church City (VA), Fredericksburg City (VA), Hampton City (VA), Hopewell City (VA), Manassas City (VA), Manassas Park City (VA), Newport News City (VA), Norfolk City (VA), Petersburg City (VA), Poquoson City (VA), Portsmouth City (VA), Richmond City (VA), Roanoke City (VA), Salem City (VA), Suffolk City (VA), Virginia Beach City (VA), Williamsburg City (VA), Winchester City (VA)
- (d) Alameda County (CA), Butte County (CA), Colusa County (CA), Contra Costa County (CA), El Dorado County (CA), Fresno County (CA), Imperial County (CA), Kern County (CA), Kings County (CA), Los Angeles County (CA), Madera County (CA), Marin County (CA), Merced County (CA), Monterey County (CA), Napa County (CA), Orange County (CA), Placer County (CA), Riverside County (CA), Sacramento County (CA), San Bernardino County (CA), San Benito County (CA), San Diego County (CA), San Francisco County (CA), San Joaquin County (CA), San Luis Obispo County (CA), San Mateo County (CA), Santa Barbara County (CA), Santa Clara County (CA), Santa Cruz County (CA), Shasta County (CA), Solano County (CA), Sonoma County (CA), Stanislaus County (CA), Sutter County (CA), Tehama County (CA), Tulare County (CA), Ventura County (CA), Yolo County (CA), Yuba County (CA), Box Elder County (UT), Cache County (UT), Davis County (UT), Salt Lake County (UT), Tooele County (UT), Utah County (UT), Weber County (UT)
- (e) includes Colorado, Delaware, Maryland, New York, New Hampshire, Rhode Island, and Utah