

SOLVENT CEMENTS, RULE 1168, AND OUTDOOR AIR QUALITY



For anyone who sells, specifies, or installs solvent cements, "low VOC" is more than a marketing phrase. In much of the U.S., it traces back to one of the most influential air-quality regulations in the country: South Coast Air Quality

Management District (SCAQMD) Rule 1168.

Rule 1168 was created to reduce smog-forming emissions by limiting the VOC content of certain adhesives and sealants, including plastic pipe solvent cements and primers. Its focus is outdoor air quality. The rule sets maximum VOC content limits by product category, requiring manufacturers to formulate within those boundaries.

What Rule 1168 Measures

Rule 1168 is strictly a VOC content regulation. It measures how much volatile organic material is present in a product, reported in grams per liter (g/L), and compares that value to a defined category limit.

What it does not measure is how much VOC a product emits into indoor air during or after installation. That distinction matters, but for Rule 1168 the intent is straightforward: reduce the total VOC load released into the outdoor environment by limiting how much VOC is in the product to begin with.

The Categories and Limits Contractors Encounter

Rule 1168 establishes different solvent cement categories, each with its own VOC content limit. Common reference limits include:

- PVC solvent cements: 425 g/L
- CPVC solvent cements: 400 g/L
- ABS solvent cements: 325 g/L
- ABS-to-PVC transition cements: 425 g/L
- Primer: 550 g/L

For distributors and contractors, these limits define what "low VOC" typically means in this category.

Products that meet the applicable Rule 1168 limit align with a standard that has influenced specifications far beyond Southern California.

Why This Rule Shaped the Market

Southern California has long faced significant ozone and smog challenges, and regulators focus on product categories that contribute incrementally across millions of everyday applications. Solvent cements fall squarely into that category: small amounts per job, but substantial impact in aggregate.

Rule 1168 pushed the industry to innovate, driving lower-VOC formulations without sacrificing the performance installers rely on, including working time, set time, joint strength, and reliability under real jobsite conditions.

Over time, compliance with Rule 1168 became a baseline expectation rather than a specialty feature. In practical terms, it helped standardize what "low VOC" means in the solvent cement market.

Industry Response and What It Signals

Manufacturers responded by reformulating products to meet VOC content limits while maintaining performance. Weld-On was an early adopter of low-VOC solvent cement technology, introducing compliant formulations in the early 1990s and later expanding to a full line of solvent cements and primers that meet Rule 1168 requirements, while discontinuing products that exceeded the limits.

That history reflects an operational reality: meeting Rule 1168 is not just a paperwork exercise. It requires real formulation experience under one of the most demanding regulatory frameworks in the industry.

What to Expect Going Forward

The direction is consistent. Regulators continue to push for lower overall VOC impact, and content limits have tightened over time across multiple categories. For buyers and specifiers, the takeaway is simple: products that meet stringent VOC content standards today are better positioned for future compliance, especially as more regions adopt California-style frameworks.