

# VpCI<sup>®</sup> Additives for Plastics, Elastomers, and Adhesives



### Simple. Clean. Efficient.

One of the most widely used VpCI<sup>®</sup> applications is the implementation of corrosion inhibitors in plastics, elastomers, and adhesives. This has been especially strategic in the implementation of VpCI<sup>®</sup> in polyethylene and polypropylene packaging for clean, dry vapor phase protection of goods in storage or shipment. VpCI<sup>®</sup> additives can also be incorporated into rubbers, sealants, adhesives, and other plastics or elastomers to provide corrosion protection to metals they come in contact with.

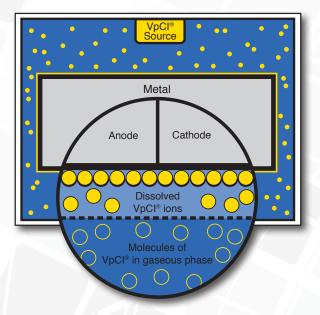
Cortec's VpCI<sup>®</sup> masterbatch brings corrosion protection to a whole new level of environmental friendliness. VpCIs embedded in polyethylene or polypropylene film vaporize and diffuse throughout an enclosed package and adsorb on metal surfaces inside the film. This thin molecular, hydrophobic layer protects the metal against corrosive elements such as oxygen, moisture, and chlorides, reducing or eliminating the need for hazardous greasy rust preventatives. Use of recyclable VpCI<sup>®</sup> films allows for easy disposal and saves both time and money on labor and rust claims.



### Benefits of VpCI<sup>®</sup> Additives for Plastic, Elastomers, and Adhesives:

- Multi-metal, vapor phase protection
- Environmentally friendly
- Cost-effective
- Compatible with a variety of plastics, elastomers, and adhesives for unique corrosion inhibiting applications

VpCl<sup>®</sup> additives form a thin molecular corrosion inhibiting layer that adsorbs on the surface of the metal, displacing existing water, chlorides, or other corrosive contaminants on the surface. These additives provide multi-metal protection for many different cleaners and cleaning applications such as surface prep, food can sterilization, and manufacturing.



### Selection Guide for Plastic, Elastomer, and Adhesive Additives

**M-95:** Versatile water soluble additive for various multi-metal systems requiring vapor phase and contact protection. Causes little to no foam. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk.

**M-126/3:** Multi-metal corrosion inhibiting additive for polyethylene, polypropylene, or molded plastics. Package: 800 pound (363 kg) gaylords.

**M-138:** Multi-metal corrosion inhibiting additive for rubbers and sealants. M-138 C used for aluminum and cast iron applications. Package: 5 pound (2.3 kg) pails, 50 pound (23 kg) and 100 pound (45 kg) fiber drums.

**M-226:** Multi-metal corrosion inhibiting additive for polyethylene, polypropylene, or molded plastics. Advanced nitrite-free formulation. Package: 800 pound (363 kg) gaylords.

**M-229:** Multi-metal corrosion inhibiting additive for polyethylene, polypropylene, or molded plastics. Nitrite-free formulation optimized for protection of galvanized steel. Package: 800 pound (363 kg) gaylords.

**M-240:** A multi-metal, flash rust, corrosion inhibitor additive for water-based paints, sealers, adhesives, fluids, and more. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk.

**M-415:** Strong vapor phase corrosion inhibitor additive for sealers, adhesives, and more. Contains FDA and USDA approved ingredients. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk.

**M-435:** Multi-metal, no-VOC, flash rust inhibitor for sealers and adhesives. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk.

**M-5120:** Patented water-based corrosion inhibitor additive for water-based skin film primers and other coatings. Package: 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk.

	METALS PROTECTED							ATTRIBUTES						
Product	Carbon Steel	Stainless	Galvanized	Aluminum	Brass	Copper	Bronze	Physical State	Transport Mechanism	Solubility	Degree of Protection	Typical Applications	Typical Dosages	
M-95	x	x	x	x	×	x	x	Liquid	Vapor Phase & Contact	Water	Long Term	Adhesives	0.25-2.5% by weight	
M-126/3	x	x	×	x	x	x	x	Powder	Vapor Phase & Contact	Water	Long Term	Plastics	1-4% by weight	
M-138	x	x	x	x	x	x	x	Powder	Vapor Phase & Contact	Solvent	Long Term	Plastics/Rubber	1-6% by weight	
M-226	x	x	×	x	x	x	x	Powder	Vapor Phase & Contact	Water*	Long Term	Plastics	1-4% by weight	
M-229	x	x	x	x	x	x	x	Powder	Vapor Phase & Contact	Water	Long Term	Plastics	1-4% by weight	
M-240	x	x	×	×	×	x	x	Liquid	Vapor Phase & Contact	Water	Long Term	Adhesives	0.5-2% by weight	
M-415	x	x	×	x				Liquid	Vapor Phase & Contact	Solvent	Long Term	Adhesives	0.5-4% by weight	
M-435	×	x	×	×	×	×	x	Liquid	Vapor Phase & Contact	Water	Long Term	Adhesives	0.2-2% by weight	
M-5120	x	x	x	x	x	x	x	Liquid	Vapor Phase & Contact	Water	Long Term	Adhesives	0.5-4% by weight	

\*Contains some insoluble carrier



## **Cortec®** Corporation





#### **Quality Management System (ISO 9001 Certified)**

**World Class Product Offerings** An innovative producer of leading edge products.

#### World Class Customer Service

A positive, long-lasting impression through every link of our company.

#### **World Class Environmental Commitment**

Cortec® commits to continued development of processes and products that are useful, non-hazardous to the environment, and recyclable whenever possible.

#### An Ethical and Respectful Company Culture

Respect and treat our colleagues, customers, and vendors as we would our own family members.

#### **Environmental Management System** (ISO 14001 Certified)

Cortec's strong environmental concern is demonstrated in the design and manufacturing of products that protect materials of all kinds from environmental degradation. A strong commitment to produce recyclable products made from sustainable resources has been and will be our future policy. This brochure can be recycled.

#### Laboratory Accreditation (ISO/IEC 17025)

Cortec® Laboratories, Inc. is the only lab in our industry that has received ISO/IEC 17025 Certification. which ensures quality in recording and reporting data, as well as calibrating equipment within the laboratory.



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