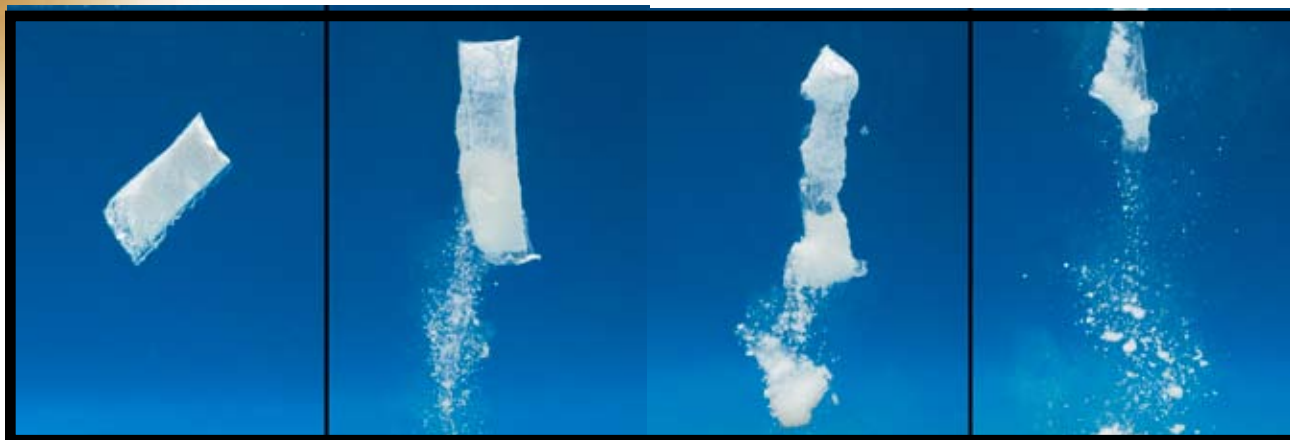




**HIGH PERFORMANCE VpCI™ PACKAGING**

# EcoSol®

## Water soluble packaging solution



### PRODUCT DESCRIPTION

EcoSol is a water soluble, biodegradable polyvinyl-alcohol (PVOH) film, ideally suited for many packaging applications. Water soluble PVA bags, sachets or pouches created from this film, provide a convenient, safe and economical delivery system for a wide range of products including detergents and cleaners, degreasers, concrete additives, pigments, biocides, water-treatment products, agricultural products, and others.

EcoSol film has excellent organic solvent resistance, which allows EcoSol pouches and bags to be used not only for dry powders, but also for liquid products.

EcoSol offers very good mechanical properties: tensile strength, tear strength, puncture resistance. These properties allow EcoSol to be used in a wide variety of rigorous applications.

EcoSol expands Cortec's line of biodegradable materials: after a few minutes of immersion at the specified temperature, EcoSol dissolves in water leaving a harmless, non-toxic aqueous solution of polyvinyl alcohol. Once the liquid solution of PVA comes into contact with common microorganisms such as those found in water-treatment plants, conversion to carbon dioxide and water takes place within about 30 days.

### ADVANTAGES

- Customer friendly
- Improves accuracy of dosing
- Improved safety
- Wide range of uses
- Biodegradable
- Resistant to organic solvents
- Heat-sealable
- Can be printed with standard inks
- Eliminates direct handling of powders and liquids

### TYPICAL USES

EcoSol can be used for packaging:

- Detergents and cleaners
- Degreasers
- Concrete additives
- Pigments
- Water-treatment products
- Biocides
- Agricultural products
- Bathing products
- Cosmetic industry (disposable cases)
- Laundry bags for hospitals



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Environmentally Safe VpCI™/MCI® Technologies

## APPLICATION

Remove the outer barrier bag and place the Ecosol bag and its contents into the water. The time for the bags to be dissolved in the water varies, depending on thickness of EcoSol and the temperature of water.

For example, EcoSol 1.5 mil (37.5 microns) thickness at 68°F (20°C) begins to dissolve within 30 seconds and is fully dissolved in 5 minutes.

## MECHANICAL PROPERTIES of EcoSol at 4 mils (100 microns)

Test Method	EcoSol (4-mil)	Low-Density Polyethylene Film (4-mil)
Tensile Strength at Break, ASTM D-882 (lbf)	14.87/>20.0	11.38/12.21
Tensile Strength at Peak, ASTM D-882 (psi)	4894.77/>5000.00	2781.2/3071.6
Puncture Resistance, ASTM D-3420,(J)	1.05	0.04

\*Machine Direction (MD)/Cross Direction (CD)

## OTHER PROPERTIES

Appearance Clear transparent film

Chemically Reistant to:

- Mineral, vegetable, animal oils
- Aliphatic hydrocarbons
- Ethers, Esters, Ketones

## AVAILABILITY

Available in sheets and bags in a variety of dimensions and thicknesses. Contact Cortec Corporation customer service for available sizes.

## PACKAGING and STORAGE

EcoSol is packaged in barrier film. Keep in dry storage area at 20-22°C (68-72°F). Shelf life of the product is 2 years, if barrier film is kept intact.

## FOR INDUSTRIAL USE ONLY

**KEEP OUT OF REACH OF CHILDREN**

**KEEP CONTAINER TIGHTLY CLOSED**

**NOT FOR INTERNAL CONSUMPTION**

**CONSULT MATERIAL SAFETY DATA SHEET FOR  
MORE INFORMATION**

## LIMITED WARRANTY

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