



BULLETIN VC-5671

antaron™ ECo gel

easy-to-use water resistance for more natural formulas

<p>formulator benefits</p> <ul style="list-style-type: none"> gel format faster dissolution less heating time required convenient 	<p>formulation benefits</p> <ul style="list-style-type: none"> excellent water resistance compatible with Hydrosheer™ technology for clear application on wet skin inherently biodegradable
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applications

leave-on sun care and skin care

product forms emulsion, gel cream, gel, mousse, solution, spray, mask, solids/sticks

available formulations from Ashland sun care emulsion, sun care balm

chemistry

INCI name: Diisopropyl Adipate (and) Ethylcellulose

non-preserved

typical properties

Appearance.....	translucent gel
Color.....	clear to pale yellow
solids	18.5 - 21.5%
solubility.....	polar esters, ethanol
shelf life	2 years



formulation guidelines

recommended use levels	0.5-1% solids (typically 2.5-5% as supplied)
temperature/mixing conditions	In alcohol-based formulations, polymer can be dissolved at room temperature with no special mixing requirements. Polymer can also be dissolved in polar esters/some organic UV filters with heat (75-85 °C) and good agitation. Refer to antaron ECo ethylcellulose technical data sheet (bulletin VC-989) for a list of compatible solvents.
when to add	Add to the phase containing oil/ alcohol. For formulations containing polar esters /organic UV filters, add polymer in solvent and heat. Mix until dissolved.
tips from our technical solvers	Soluble in alcohol at room temperature. Soluble in polar esters with heat. Material is known to be insoluble in: water, butylene glycol, propylene glycol, glycerin, isododecane, triglycerides, silicones, vegetable and mineral oils. Refer to antaron™ ECo ethylcellulose technical data sheet (bulletin VC-989) for a list of preferred solvents.

safety, handling, and storage

Storage is recommended in tightly closed original containers at temperatures between 5°C and 25°C. Additional information concerning safety, handling and storage is supplied in the safety data sheet, which can be made available upon request. such information includes:

- o classification and labelling per regulation for transport and for dangerous substances
- o protective measures for storage and handling

a toxicology summary can also be made available, on a confidential basis, by contacting Ashland's toxicology department.

regulatory

INCI: Diisopropyl Adipate; CAS #: 6938-94-9

INCI: Ethylcellulose; CAS #: 9004-57-3

INCI names of components are listed on the China IECIC-CFDA (2015).

other regulatory information available on request.

keywords: cellulose, easy to use, water resistance