

ACEDAG LTD

Infection control in the workplace

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TECHNICAL DATA SHEET

ACEDAG DISSOLV-A-WAY HOT WATER SOLUBLE LAUNDRY SACKS

TYPICAL PROPERTIES (23°C and 50% RH)

Tensile strength	25-75 N/MM ² DIN 53455-6-5
Elongation at breaks	60-250%
Elasticity	MD 320N/mm TD 480 n/MM
Gas permeability	0.8 – 1.3cm ³ /m ² /day/bar (DIN 53380)
Surface resistivity	4 x 10 ⁷ OHMS
Specific gravity	1.25 g/cm ³ (ISO R1183 Sink Float Method)
Thickness tolerance	+/- 15%.
Dimensional tolerance	+/- 2.5%

Packaging

Laundry bags are supplied packed in protective polyethylene within the outer carton.

Solubility

It is usual to determine cold water solubility as 4° to 40°C and hot water solubility as 40° to 80°C. The dissolution process can be termed the transition from solid via gel-like state to viscous solution and uniform distribution in the solvent. It is therefore normal practice to indicate dispersion time – when the pack is broken down sufficiently to release the contents – and solution time when the film is entirely dissolved.

Thickness		Water Temperature	Water Temperature	Water Temperature
		60°C	65°C	70°C
17.5mu	Dispersion	25 seconds	18 seconds	15 seconds
	Solution	280 seconds	180 seconds	160 seconds
20mu	Dispersion	30 seconds	20 seconds	18 seconds
	Solution	300 seconds	200 seconds	180 seconds
25mu	Dispersion	35 seconds	25 seconds	20 seconds
	Solution	320 seconds	240 seconds	200 seconds

Recommended maximum contents weight

Maximum recommended weight of contents for 17.5 mu sack 7.5 kg.

Maximum recommended weight of contents for 20 mu sack 10 kg.

Maximum recommended weight of contents for 25 mu sack 15 kg.

Storage

When storing **Acedag Dissolv-a-way Hot Water Soluble Laundry Sacks**, avoid extreme humidity and temperatures. Cold storage or very low humidity for example, can cause embrittlement. Laundry bags under normal conditions should be kept in protective polythene and carton materials provided.

Care should be taken at all times not to allow the film to become wet.

Ideal storage conditions are 10-20°C with 30-60% relative humidity.

General Qualities

Biodegradable, elastic, anti-static, solvent resistant, fragrance retentive, good gas barrier, printable with both conventional and water disposable inks, and non-toxic.

Chemical Resistance

Acedag Dissolv-a-way films have very good chemical resistance to almost all hydrocarbons, vegetable, mineral and animal oils, fats and organic solvents.

Acedag Dissolv-a-way films are not resistant to strong acids and strong alkalis, these chemicals tending to change the nature of the film, reducing its solubility. Certain products containing boric compounds and hydrochloric bases also react with polyvinyl alcohol. Some basic compounds in contact with the film can cause further hydrolysis, so lowering solubility rate or increasing solubility temperature. Boric compounds can cross-link the film, rendering it completely insoluble in some cases. Glycols, (e.g. PEG) can cause swelling and softening of the film since they act to some extent as plasticizers.

Environment

Acedag Dissolv-a-way film is an environment-friendly, biodegradable film. It is non-toxic, non-hazardous and disposable.

Acedag Dissolv-a-way films are not flammable, but can burn freely in sheet form. When burnt, they convert to carbon dioxide and water.

Acedag Dissolv-a-way films satisfy the industrial safety requirements relating to the handling of dangerous substances and in the maintenance of air and water purity for environmental protection.

Effluent solutions containing Acedag Dissolv-a-way films are attacked by microorganisms with the film decomposing to Carbon Dioxide and water.

Exposure tests have been carried out with concentrations of 500mg of PVOH per litre of water on sensitive fish with no ill effects, this being far in excess of possible concentrations in ground water systems.

N.B

This information is based on our present state of knowledge and serves to provide general notes for assistance in the use of Acedag films. It should, therefore, not be construed as guaranteeing specific properties of the films denoted, or suitability for a particular application. It is not intended to be in any way exhaustive or as a substitute for an existing or potential user's own evaluation methods.