

## DuPont™ Entira™ AS 500

### Entira™ AS resins Product Data Sheet

#### Description

**Product Description** DuPont™ Entira™ AS 500 is an extremely hygroscopic ionomer resin that is supplied as free-flowing pellets.

#### Restrictions

**Material Status** • Developmental: Active

#### Typical Characteristics

**Uses** • Film  
Industrial Applications  
Packaging

**Features** Entira™ AS 500 is used to lower the static decay time and surface resistivity of LDPE, LLDPE and other polymers.

**Characteristics / Benefits** Entira™ AS 500 can be precompounded or dry blended into polymers for extrusion, molding, or various other processing methods

**Applications** Antistatic agent for polyolefins and other polymers, in films, moldings and extruded forms

#### Typical Properties

Physical	Nominal Values	Test Method(s)	
* Density ( )	1.0 g/cm <sup>3</sup>	ASTM D792	ISO 1183
* Melt Flow Rate (190°C/2.16kg)	8.0 g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Values	Test Method(s)	
* Melting Point (DSC)	92°C (198°F)	ASTM D3418	ISO 3146

#### Processing Information

##### General

\* Maximum Processing Temperature 250°C (482°F)

**General Processing Information** Entira™ AS 500 is a hygroscopic material. To minimize exposure to moisture, any remaining material should be hermetically sealed in a barrier package immediately after use, removing as much air from the package as possible.

In order to reuse remaining material that has been hermetically sealed, the material should be dried under vacuum with a nitrogen flow at a maximum of 60C (140F) for several hours prior to use. Alternately use of a dessicated air drier with a dewpoint of the air at -40C (-40F) may be possible to use. Maximum air drying temp of 60C.

Entira™ AS 500 is available in pellet form for use in conventional equipment for processing polyolefins. It can be fed together with base polymers and other additives in the hopper during processing. Typical addition levels range from 10% to 20%.

#### **FDA Status Information**

Entira™ AS 500 resin is designed to be used as an antistatic agent in blends with base resins that otherwise have a suitable FDA clearance for the intended use. Entira™ AS 500 resin, when blended with suitable base resins, may only be used in contact with dry food containing no surface fat or oil, i.e. Food Type VIII as set forth in 21 CFR 176.170(c) Table 1. There is no limit on the amount of Entira™ AS 500 resin that may be used other than that which is reasonably required to accomplish the desired technical effect. Such use may be properly said to comply fully with the Federal Food, Drug, and Cosmetic Act and all applicable food additive regulations.

#### **Regulatory Information**

For information on compliance with food contact laws & regulations of other countries, please contact your local DuPont representative.

#### **Safety & Handling**

Entira™ AS 500 resins as supplied by DuPont are not considered hazardous materials. As with any hot material, care should be taken to protect the hands and other exposed parts of the body when handling molten polymer. At recommended processing temperatures, small amounts of fumes may evolve from the resins. When resins are overheated, more extensive decomposition may occur. Adequate ventilation should be provided to remove fumes from the work area. Disposal of scrap presents no special problems and can be by landfill or incineration in a properly operated incinerator. Disposal should comply with local, state, and federal regulations. Resin pellets can be a slipping hazard. Loose pellets should be swept up promptly to prevent falls. For more detailed information on the safe handling and disposal of DuPont resins, a Material Safety Data Sheet can be obtained from the DuPont Packaging and Industrial Polymers website or by contacting your sales representative.

### **Read and Understand the Material Safety Data Sheet (MSDS) before using this product**

#### **Regional Centres**

DuPont operates in more than 70 countries. For help finding a local representative, please contact one of the following regional customer contact centers:

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