

## DuPont™ Selar® PA 2072

### Selar® resins Product Data Sheet

#### Description

**Product Description** Selar® PA 2072 is an amorphous nylon (polyamide) resin which exhibits superior transparency, good barrier properties to gases, water, solvents and essential oils and high temperature structural properties which make it suitable for consideration in a number of applications.

It is available in the form of small, free flowing pellets in 25 kg (55 lb.) foil-lined bags or 750 kg. (1653 lb.) foil lined boxes.

#### Restrictions

**Material Status** Commercial: Active

#### Typical Characteristics

**Composition** 100% By Weight 6I/6T polyamide

**Features** Selar® PA 2072 barrier resin can be utilized in both flexible and rigid packaging structures and is characterized by very good gas O<sub>2</sub>, CO<sub>2</sub> and moisture barrier. Furthermore, Selar® PA is unique in that its gas barrier improves with increasing relative humidity. It has excellent physical properties, high temperature resistance and excellent optical properties desirable in a structural resin. Like other nylons, Selar® PA barrier resin is an excellent barrier for many types of solvent systems. In general it has good resistance to aliphatic, aromatic hydrocarbons, dilute alkalis, higher molecular weight alcohols, and low concentrations of lower molecular weight alcohols. It is not recommended for acids or concentrated lower molecular weight alcohols. End use testing is recommended for each application. With its high degree of stiffness, very good gas and moisture barrier, solvent resistance and excellent gloss and clarity, Selar® PA used in monolayer provides a "glass like" container for rigid packaging.

**Characteristics / Benefits** "Inherent Viscosity" of 0.72 via ASTM D4066  
 "Moisture content" at time of packaging: --- max 0.05 % via ISO 15512

**Applications** Modification of EVOH for broader thermoforming window.

Nylon 6 modification for better oxygen barrier (at higher humidities), broader thermoforming window, and easier extrusion processing,

#### Typical Properties

Physical	Nominal Values	Test Method(s)	
*Density ( )	1.19 g/cm <sup>3</sup>	ASTM D792	ISO 1183
*Solution Viscosity ( )	*** See IV information above ***		
Thermal	Nominal Values	Test Method(s)	
*Glass Transition Temperature ( DSC)	125 °C ( 257 °F)	ASTM D3417	ISO 3146

#### Processing Information

\*Maximum Processing Temperature 310 °C ( 590 °F)

**General Processing Information** DuPont™ Selar® PA is an amorphous nylon resin which can be processed on conventional extrusion, coextrusion, injection Molding or blow molding equipment that is designed to process nylon or polyolefin resins.

Suggested "start-up" melt temperatures should be in the minimum range of 240°C to 250°C (464°F to 482°F) unless prior experience has shown that lower temperatures are acceptable. If lower melt temperatures are desired, machine temperatures should be reduced after "start-up" while carefully monitoring drive power and head pressure.

#### FDA Status Information

SELAR® PA 2072 Barrier Resin complies with Food and Drug Administration Regulation 21 CFR 177.1500(a)(12) and (b)(12) - - Nylon resins, subject to the limitations and requirements therein. This Regulation describes nylon resins that may be used in contact with food, except alcoholic beverages containing more than 8 percent alcohol.

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#### Regulatory Information

For information on regulatory compliance outside of the U.S., consult your local DuPont representative.

#### Safety & Handling

For information on appropriate Handling & Storage of this polymeric resin, please refer to the material Safety Data Sheet..

A Product Safety Bulletin, material Safety Data Sheet, and/or more detailed information on extrusion processing and/or compounding of this polymeric resin for specific applications are available from your DuPont Performance Materials representative.

### 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:

#### Americas

DuPont Company  
Chestnut Run Plaza – Bldg. 730  
974 Centre Road  
Wilmington, Delaware  
19805 U.S.A.  
Toll-Free (USA): 1-800-628-6208  
Telephone: 1-302-774-1000  
Fax: 1-302-355-4013

DuPont do Brasil, S.A.  
Alameda Itapecuru, 506  
06454-080 Barueri, SP Brasil  
Telephone: +55 11 4166 8000  
Fax: +55 11 4166 8736

#### Asia Pacific

DuPont China Holding Co., Ltd.  
Shanghai Branch  
399 Keyuan Road, Bldg. 11  
Zhangjiang Hi-Tech Park  
Pudong New District, Shanghai  
P.R. China (Postcode: 201203)  
Telephone +86 21 3862 2888  
Fax +86-21-3862-2889

#### Europe / Middle East / Africa

DuPont de Nemours Int'l. S.A.  
2,Chemin du Pavillon Box 50  
CH-1218 Le Grand Saconnex  
Geneva, Switzerland  
Telephone +41 22 717 51 11  
Fax +41 22 717 55 00

<http://www.dupont.com>

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