

Soarnol[®] AT4403

ETHYLENE VINYL ALCOHOL COPOLYMER

44 mol% Ethylene Content

Applications

Soarnol AT4403 is a 44 mol% ethylene content standard grade of Soarnol with a low melt flow rate. Soarnol AT4403 has excellent water resistance and its gas barrier property is not drastically lower at high humidity. This resin is primarily used in coextruded film applications and can also be used in shrink packaging.

General Properties

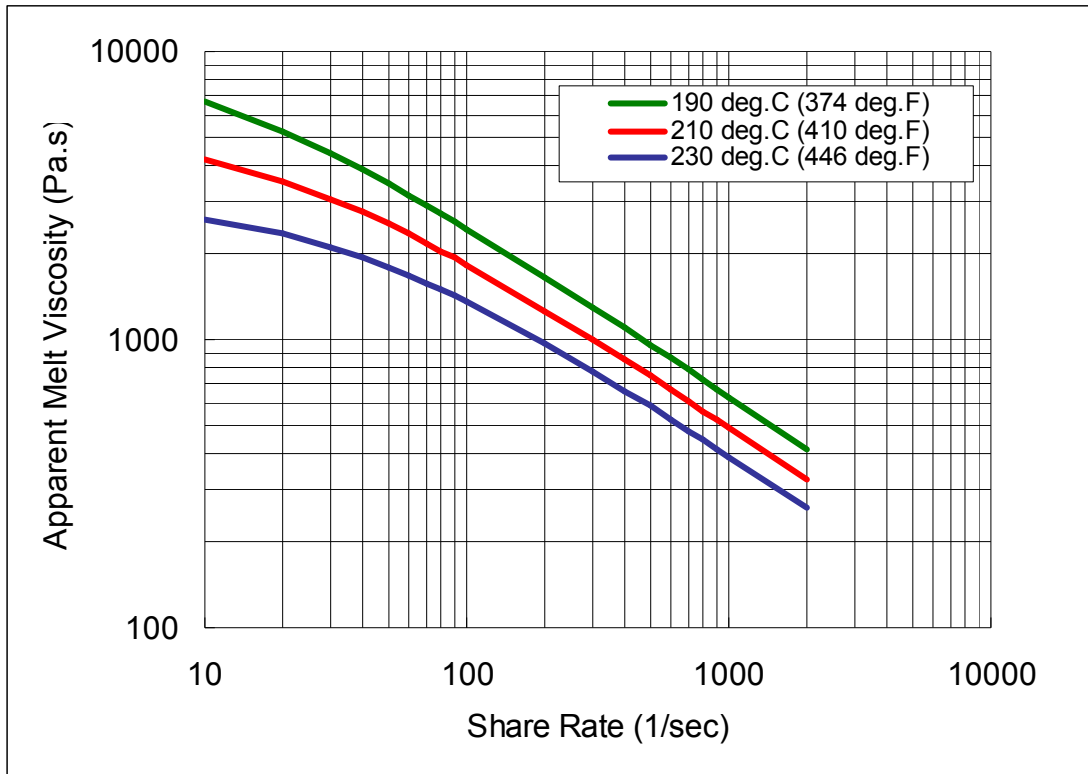
<i>Properties</i>	<i>Unit</i>	<i>Value</i>
Ethylene Content	mol%	44
MFR ¹⁾ (210 degree C, 2160g)	g/10min	3.5
Volatile Matter	%	< 0.3
Melting Point ²⁾	degree C	164
Crystallization Temperature ²⁾	degree C	144
Glass Transition Temperature ²⁾	degree C	55
Oxygen Permeability (20C, 65%RH) ³⁾	cc 20um / m ² day atm	1.5
	cc mil / 100inch ² day atm	0.076

1): Measured with Melt Indexer

2): Measured with DSC, both heating and cooling speeds of 10 C/min

3): Measured with OXTRAN 10/50 (MOCON)

Melt Viscosity



Example of Processing

- Extruder: 40 mm ϕ Single screw extruder, L/D = 28
- Screw: Full-flighted, constant pitch type, CR = 3.5
- Screen pack: 80/120/50 mesh
- Die: Manifold type, die width = 450 mm, lip clearance = 0.2 mm

Processing Temperature

	B ₁	B ₂	B ₃	B ₄	B ₅	A
deg.C	170	190	210	220	220	220
deg.F	338	374	410	428	428	428

Quality and Safety for Application of Soarnol AT4403

High quality Soarnol is produced by NOLTEX L.L.C. in U.S.A. and Mizushima plant in Japan. Both plants are certified to meet the requirement of ISO 9001.

Soarnol contains no heavy metals or other harmful substances. Soarnol meets the Food Sanitation Standards of various countries.

U.S.A: US FDA 21, C.F.R. § 177.1360
JAPAN: Voluntary Regulation Standard of Sanitation Council for Polyolefin, etc., Ministry of Health and Welfare (Notification No. 370)
EU: Directive 90/128/EEC

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