

Soarnol™ E3808

ETHYLENE VINYL ALCOHOL COPOLYMER (EVOH)

38 mol% Ethylene Content

Application

Soarnol™ E3808 is one of the standard grades of Soarnol™, its ethylene content is 38 mol% with an intermediate MFR (melt flow rate). Soarnol™ E3808 has excellent barrier to gases. This resin is primarily used in co-extruded cast film and co-extrusion coating applications. Furthermore, it can also be used in thermoforming and shrink packaging.

General Properties

Properties	Unit	Value
Ethylene Content	mol%	38
MFR ¹⁾ (210 degree C, 2160g)	g/10min	8.0
Volatile Matter	%	< 0.3
Melting Point ²⁾	degree C	173
Crystallization Temp. ²⁾	degree C	152
Glass Transition Temp. ²⁾	degree C	58
Density ³⁾ (23 degree C)	g/cm ³	1.17
Oxygen Permeability ⁴⁾ (20 degree C x 65%RH)	cc.20µm / m ² .day.atm cc.mil / 100inch ² .day.atm	0.7 0.036

1): Measured with Melt Indexer

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

3): Measured with Micromeritics Gas Pycnometer

4): Measured with OXTRAN 2/20 (MOCON)

*The above figures are representative values and are not guaranteed.

Melt Viscosity

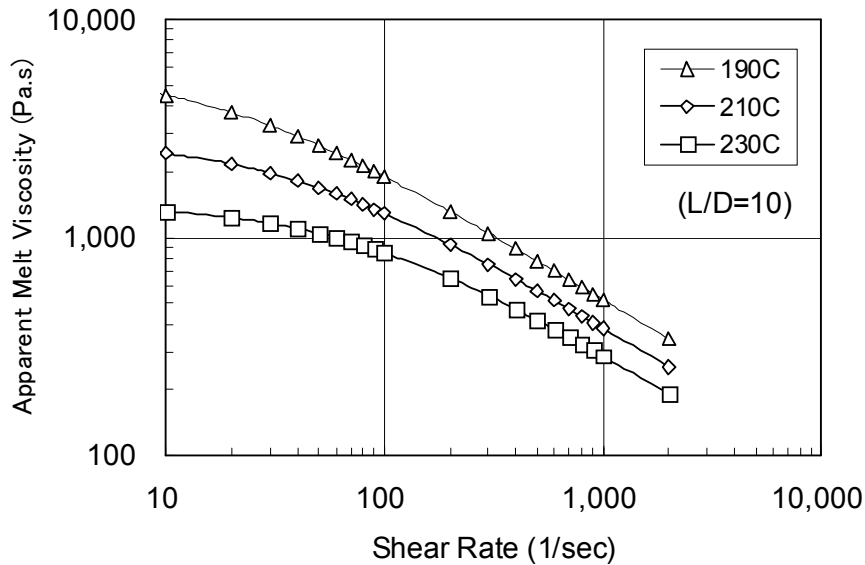


Fig. 1 Melt Viscosity of Soarnol™ E3808

Example of Processing

Extruder : 40 mmφ L/D = 28
 Screw : full flight, constant pitch type, C.R. = 3.5
 Screen pack : 90/90 mesh

Processing Temperature

	C ₁	C ₂	C ₃	C ₄	C ₅	AD
deg.C	170-200	185-210	200-230	200-230	200-230	200-230
deg.F	338-392	365-410	392-446	392-446	392-446	392-446

Quality and Safety for Application of Soarnol™ E3808

High quality Soarnol™ is produced by Mizushima plant in Japan, NOLTEX L.L.C. in U.S.A. and NIPPON GOHSEI UK Ltd. in U.K.. All 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

EU : Commission Regulation (EU)No. 10/2011 and its amendments

JAPAN : Ministry of Health and Welfare Announcement No.370(1959) and Its Latest Amendment No.18(1994)

Voluntary Standards for Food Contact Substances and Polymers (JHOSPA)

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