

SoarnoL™ H4815B

ETHYLENE VINYL ALCOHOL COPOLYMER (EVOH)

48 mol% Ethylene Content

Application

SoarnoL™ H4815B is one of the standard grades of SoarnoL™, its ethylene content is 48 mol% with a high MFR (melt flow rate). SoarnoL™ H4815B has the best water resistance of all SoarnoL™ grades and good gas barrier property, especially in high humidity environments. Its gas barrier property is not drastically lower at high humidity. This resin is used in co-extruded film, co-extrusion coating and shrink packaging.

General Properties

Properties	Unit	Value
Ethylene Content	mol%	48
MFR ¹⁾ (210 degree C, 2160g)	g/10min	15
Volatile Matter	%	< 0.3
Melting Point ²⁾	degree C	158
Crystallization Temp. ²⁾	degree C	138
Glass Transition Temp. ²⁾	degree C	48
Density ³⁾ (23 degree C)	g/cm ³	1.12
Oxygen Permeability ⁴⁾ (20 degree C x 65%RH)	cc.20μm / m ² .day.atm cc.mil / 100inch ² .day.atm	2.3 0.117

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

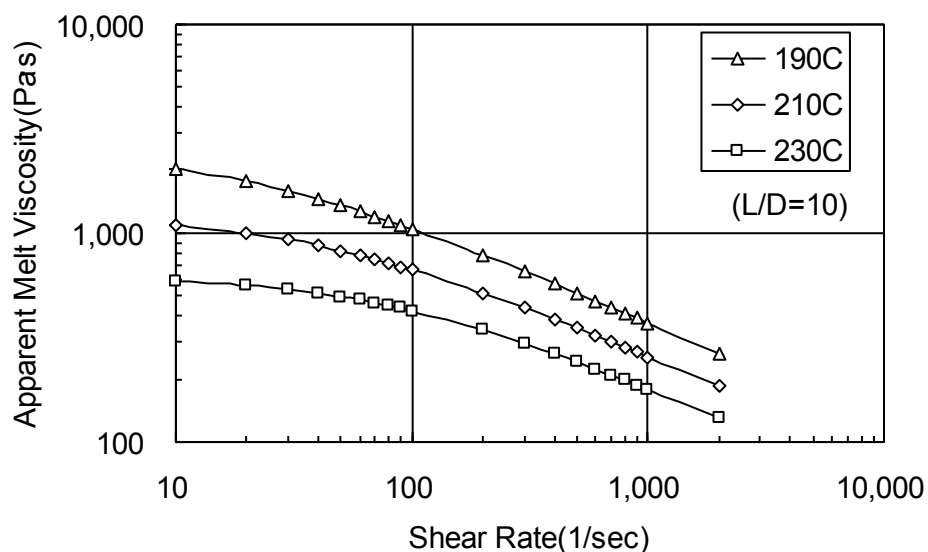


Fig. 1 Melt Viscosity of SoarnOL™ H4815B

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	170-190	185-210	200-230	200-230	200-230	200-230
deg.F	338-374	365-410	392-446	392-446	392-446	392-446

Quality and Safety for Application of SoarnoL™ H4815B

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. Please contact us to inquire about food product hygiene for the various SoarnoL™ brands or for food hygiene conformity in other 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)

CHINA : GB9685, GB4806.6 and their amendments

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