

# **SoarnoL™ DT2904R**

ETHYLENE VINYL ALCOHOL COPOLYMER (EVOH)

29 mol% Ethylene Content

## Application

SoarnoL™ DT2904R is a 29 mol% ethylene content standard grade of SoarnoL™ with a low MFR (melt flow rate). SoarnoL™ DT2904R has excellent gas barrier property at low humidity, good thermal stability and is used in co-extruded film as well as co-extrusion blow-molded containers.

## General Properties

Properties	Unit	Value
Ethylene Content	mol%	29
MFR <sup>1)</sup> (210 degree C, 2160g)	g/10min	3.8
Volatile Matter	%	< 0.3
Melting Point <sup>2)</sup>	degree C	188
Crystallization Temp. <sup>2)</sup>	degree C	163
Glass Transition Temp. <sup>2)</sup>	degree C	62
Density <sup>3)</sup> (23 degree C)	g/cm <sup>3</sup>	1.21
Oxygen Permeability <sup>4)</sup> (20 degree C x 65%RH)	cc.20µm / m <sup>2</sup> .day.atm cc.mil / 100inch <sup>2</sup> .day.atm	0.2 0.010

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

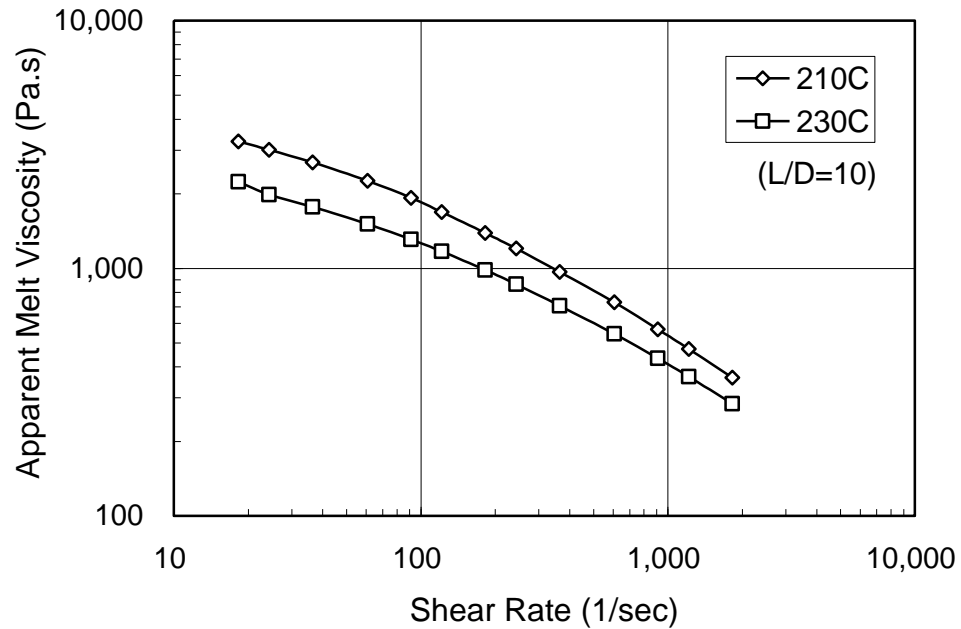


Fig. 1 Melt Viscosity of Soarnol™ DT2904R

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 <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	AD
deg.C	190-210	200-220	210-230	210-230	210-230	210-230
deg.F	374-410	392-428	410-446	410-446	410-446	410-446

## Quality and Safety for Application of Soarnol™ DT2904R

High quality Soarnol™ is produced by Okayama 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

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)

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

CHINA : GB9685, GB4806.6 and their amendments

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