

# **Soarnol™ DC3203RB**

ETHYLENE VINYL ALCOHOL COPOLYMER (EVOH)

32 mol% Ethylene Content

## Application

Soarnol™ DC3203RB is one of the standard grades of Soarnol™, its ethylene content is 32 mol% with a low MFR (melt flow rate).

Soarnol™ DC3203RB has excellent barrier to gases, and is primarily used in co-extrusion blow-molded containers, co-extruded film and tube applications.

## General Properties

Properties	Unit	Value
Ethylene Content	mol%	32
MFR <sup>1)</sup> (210 degree C, 2160g)	g/10min	3.8
Volatile Matter	%	≤0.30
Melting Point <sup>2)</sup>	degree C	183
Crystallization Temp. <sup>2)</sup>	degree C	160
Glass Transition Temp. <sup>2)</sup>	degree C	61
Density <sup>3)</sup> (23 degree C)	g/cm <sup>3</sup>	1.19
Oxygen Permeability <sup>4)</sup>	cc.20μm / m <sup>2</sup> .day.atm	0.15
(20 degree C x 65%RH)	cc.mil / 100inch <sup>2</sup> .day.atm	0.008

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 2/22 (MOCON)

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

## Melt Viscosity

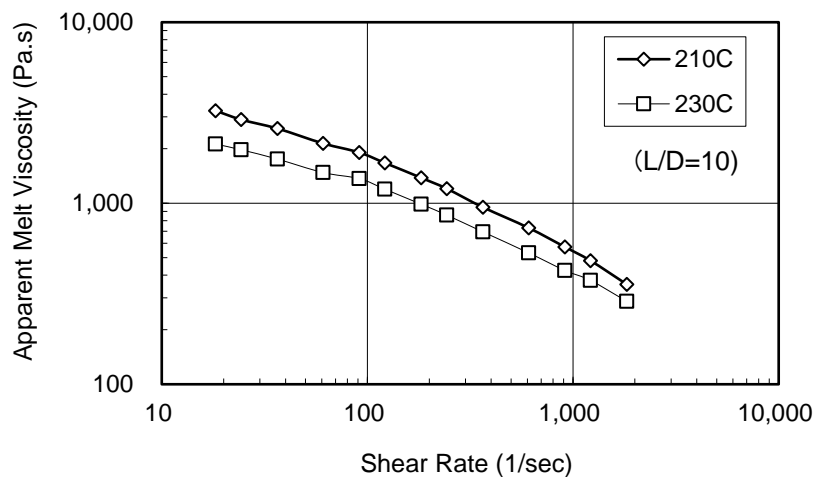


Fig. 1 Melt Viscosity of Soarnol™ DC3203RB

## Example of Processing

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

## Processing Temperature (degree C)

C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	AD
190-210	200-220	210-230	210-230	210-230	210-230

## Quality and Safety for Application of Soarnol™ DC3203RB

High quality Soarnol™ is produced by Okayama plant in Japan, Mitsubishi Chemical America Inc. in U.S.A. and Mitsubishi Chemical 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.

JAPAN : Ministry of Health and Welfare Announcement No.370(1959) and Its Latest Amendment No.196(2020)

U.S.A : US FDA 21, C.F.R. §177.1360

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

CHINA : GB9685-2016, GB4806.6-2016, GB4806.7-2023 (Enforced on September 6, 2024) and their amendments

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## MITSUBISHI CHEMICAL CORPORATION

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