

SoarnoL™ DC3203FB

ETHYLENE VINYL ALCOHOL COPOLYMER (EVOH)

32 mol% Ethylene Content

Application

SoarnoL™ DC3203FB is one of the standard grades of SoarnoL™, its ethylene content is 32 mol% with a low MFR (melt flow rate). SoarnoL™ DC3203FB 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 ¹⁾ (210 degree C, 2160g)	g/10min	3.2
Volatile Matter	%	< 0.3
Melting Point ²⁾	degree C	183
Crystallization Temp. ²⁾	degree C	160
Glass Transition Temp. ²⁾	degree C	61
Density ³⁾ (23 degree C)	g/cm ³	1.19
Oxygen Permeability ⁴⁾ (20 degree C x 65%RH)	cc.20μm / m ² .day.atm cc.mil / 100inch ² .day.atm	0.3 0.015

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

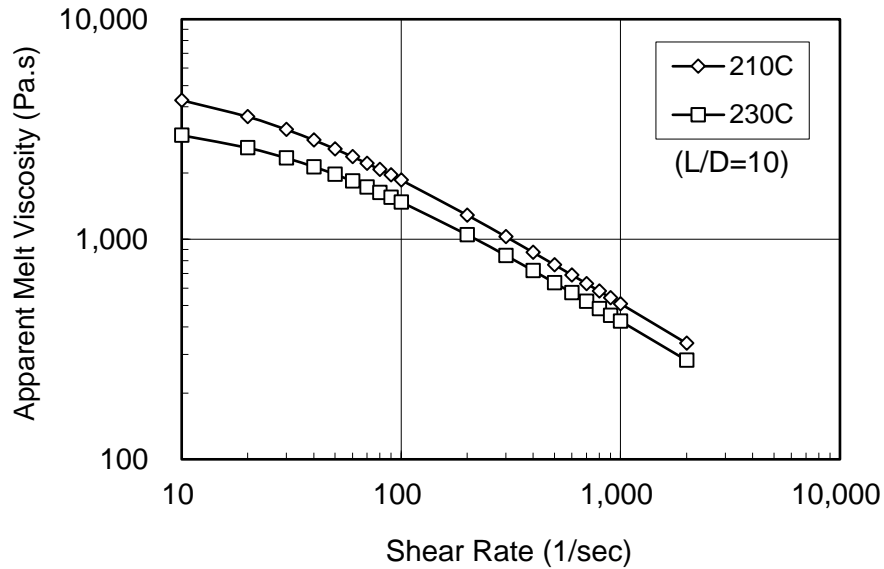


Fig. 1 Melt Viscosity of Soarnol™ DC3203FB

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	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

Revised date on Apr. 1st 2020

Quality and Safety for Application of Soarnol™ DC3203FB

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

Soarnol™ Contacts

Soarus L.L.C.	3930 Ventura Drive, Suite 300, Arlington Heights, IL 60004, USA TEL +1-847-255-1211 FAX +1-847-255-4343
Mitsubishi Chemical Corporation Head Quarters	1-1, Marunouchi 1-Chome, Chiyoda-Ku, Tokyo 100-8251, Japan TEL +81-3-6748-7803 FAX +81-3-3286-1239
NIPPON GOHSEI Europe GmbH	Merowingerplatz 1a, D-40225, Duesseldorf, Germany, Life Science Center TEL +49-211-385488-0 FAX +49-211-385488-29
Mitsubishi Chemical (China) Co.,Ltd.	38-39th Floor, Grand Gateway Office Tower 1, 1 Hongqiao Rd.,Xuhui District, Shanghai, 200030 China TEL +86-21-5407-6161 FAX +86-21-5407-6262
Mitsubishi Chemical Asia Pacific Pte. Ltd.	41 Science park Road #02-12/13 The Gemini Singapore Science Park II Singapore 117610 TEL +65-6263-0970 FAX +65-6423-1562
Processing-Technique Development Center	3-10, Ushiodori, Kurashiki, Okayama 712-8054, Japan TEL +81-86-455-5214 FAX +81-86-455-5289

URL: <http://www.soarnol.com/>
<http://www.soarus.com/>
<https://www.m-chemical.co.jp/>