



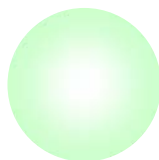
Soarnol®

ETHYLENE-VINYLAALCOHOL COPOLYMER



DC3203RB

32 mol% Ethylene Content



[General Description]

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 coextruded blow-molded containers and coextruded film applications. This resin can also be used in coextruded sheet.

[General Properties]

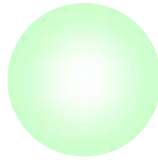
<i>Property</i>	<i>Unit</i>	<i>Value</i>
Ethylene Content	mol%	32
MFR ¹⁾ (@210°C, 2160g)	g/10min	3.8
Volatile Matter	%	< 0.3
Melting Point ²⁾	deg C	183
Crystallization Temperature ²⁾	deg C	160
Oxygen Permeability ³⁾	cc 20 μ m / m ² day atm	0.5
20deg C-65%RH	cc·mil/100inch ² ·day·atm	0.025
WVTR	g 30 μ m / m ² 24hrs	32-58
40deg C-90%RH		

1): Measured with Melt Indexer

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

3): Measured with OXTRAN 10/50 (MOCON)





[Melt Viscosity]

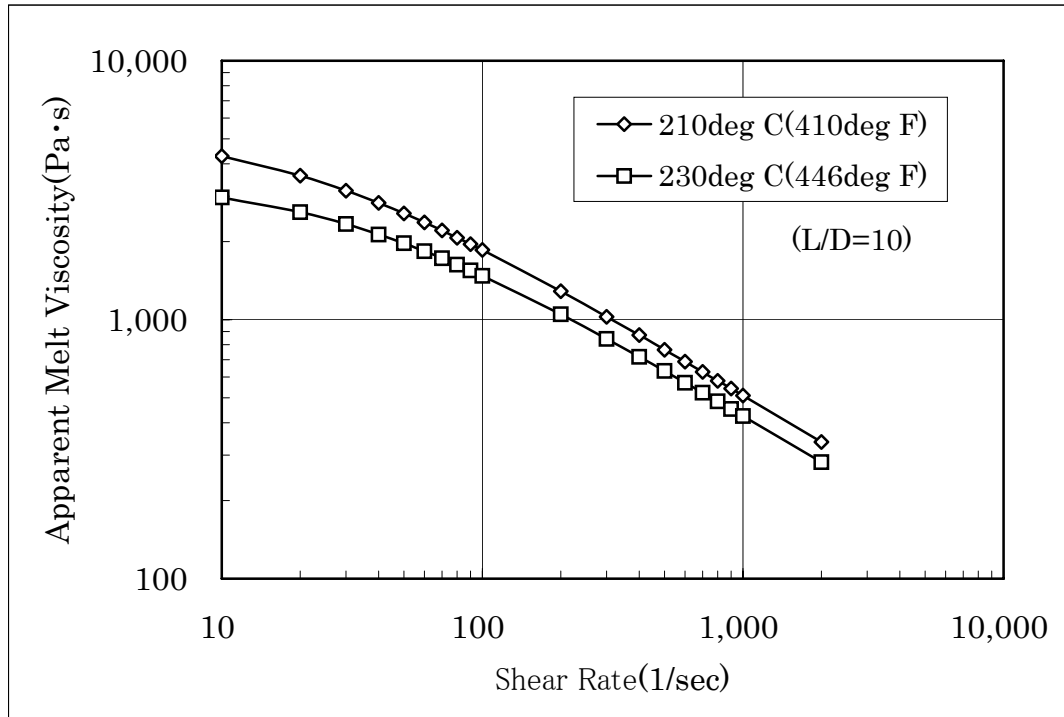


Fig.1 Melt Viscosity of Soarnol DC3203RB

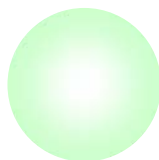
[Example of Processing]

- Extruder: 40 mm ϕ single screw extruder, L/D = 28
- Screw: Full-flighted, constant pitch type, CR = 3.5
- Screen pack: 80/120/50 mesh
- Die: Manifold type, die width = 450 mm, lip clearance = 0.2 mm

Processing Temperature: deg C(deg F)

C ₁	C ₂	C ₃	C ₄	C ₅	Head	Die
180	200	220	230	230	230	200-220
(356)	(392)	(428)	(446)	(446)	(446)	(392-428)





[Hygienic Performance of Soarnol DC3203RB]

Soarnol DC3203RB contains no heavy metals or other harmful substances.
Soarnol DC3203RB meets the Food Sanitation Standards of various countries.

Japan: Ministry of Health and Welfare Announcement No.370(Dec. 28,1959)
and Its Latest Amendment No.18(Jan. 31,1994)

Self-Restrictive Requirements on Food-Contacting Articles
Made of Polyolefins and Certain Polymers

U.S.A.: FDA 21CFR 177.1360(a)(3) and 175.105

E U: European Commission Directive 90/128/EEC,
and Its Latest Amendment

Date Revised: April. 4, 2008

The Nippon Synthetic Chemical Industry Co., Ltd

Head Office	:	Umeda Sky Building, 1-88, Oyodonaka 1-chome, Kita-ku, Osaka 531-0076, Japan	TEL 81-6-6440-5313	FAX 81-6-6440-5326
Tokyo Office	:	Mitsui Sumitomo Insurance TEPCO Bldg., 6-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-0031, Japan	TEL 81-3-3564-7009	FAX 81-3-3564-7015
Nagoya Office	:	Dainagoya Building, 28-12, Meieki 3-chome, Nakamura-ku, Nagoya 450-0002, Japan	TEL 81-52-565-3538	FAX 81-52-565-3574
Central Research Laboratory	:	13-1, Muroyama 2-chome, Ibaraki, Osaka 567-0052, Japan	TEL 81-726-43-2256	FAX 81-726-43-2257
Kyushu Office	:	Daihaku Center Building, 19-24, Hakata-Ekimae 2-chome, Hakata-ku, Fukuoka 812-0011, Japan	TEL 81-92-432-0104	FAX 81-92-432-0122
Processing-Technique Development Center	:	8-1, Matsue 4-chome, Kurashiki, Okayama 712-8052, Japan	TEL 81-86-455-5214	FAX 81-86-455-5289
NIPPON GOHSEI Europe GmbH	:	Merowingerplatz 1a, D-40225, Düsseldorf, Germany Life Science Center	TEL 49-211-385488-24	FAX 49-211-385488-29
NIPPON GOHSEI UK Ltd.	:	Unit 14 Marina Court, Castle Street, Hull HU1 1TJ, UK	TEL 44-1482-333320	FAX 44-1482-333325
NOLTEX L.L.C.	:	12220 Strang Road, La Porte TX 77571-9740, USA	TEL 1-281-842-5000	FAX 1-281-842-5095
SOARUS L.L.C.	:	3930 Ventura Drive, Suite 440 Arlington Heights, IL 60004, USA	TEL 1-847-255-1211	FAX 1-847-255-4343
Shanghai Office	:	Room 4211A The Center, No.989 ChangLe Road, Shanghai Post Code 200031	TEL 86-21-5407-6333	FAX 86-21-5407-6038

URL: <http://www.soarnol.com/>
<http://www.nichigo.co.jp/>

