

***Soarnol***®

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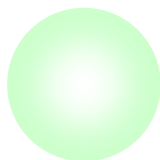
ETHYLENE-VINYLAALCOHOL COPOLYMER



**DC3212B**

32 mol% Ethylene Content





## [General Description]

Soarnol DC3212B is one of the standard grades of “Soarnol®”, its ethylene content is 32 mol% with a high MFR(melt flow rate).

Soarnol DC3212B 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 coextrusion coating.

## [General Properties]

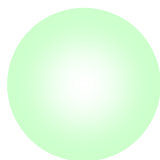
<i>Property</i>	<i>Unit</i>	<i>Value</i>
Ethylene Content	mol%	32
MFR <sup>1)</sup> (@210deg C, 2160g)	g/10min	12
Volatile Matter	%	< 0.3
Melting Point <sup>2)</sup>	deg C	183
Crystallization Temperature <sup>2)</sup>	deg C	160
Oxygen Permeability <sup>3)</sup>	cc 20 $\mu$ m / m <sup>2</sup> day atm	0.5
20deg C-65%RH	cc·mil/100inch <sup>2</sup> ·day·atm	0.025
WVTR	g 30 $\mu$ m / m <sup>2</sup> 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]

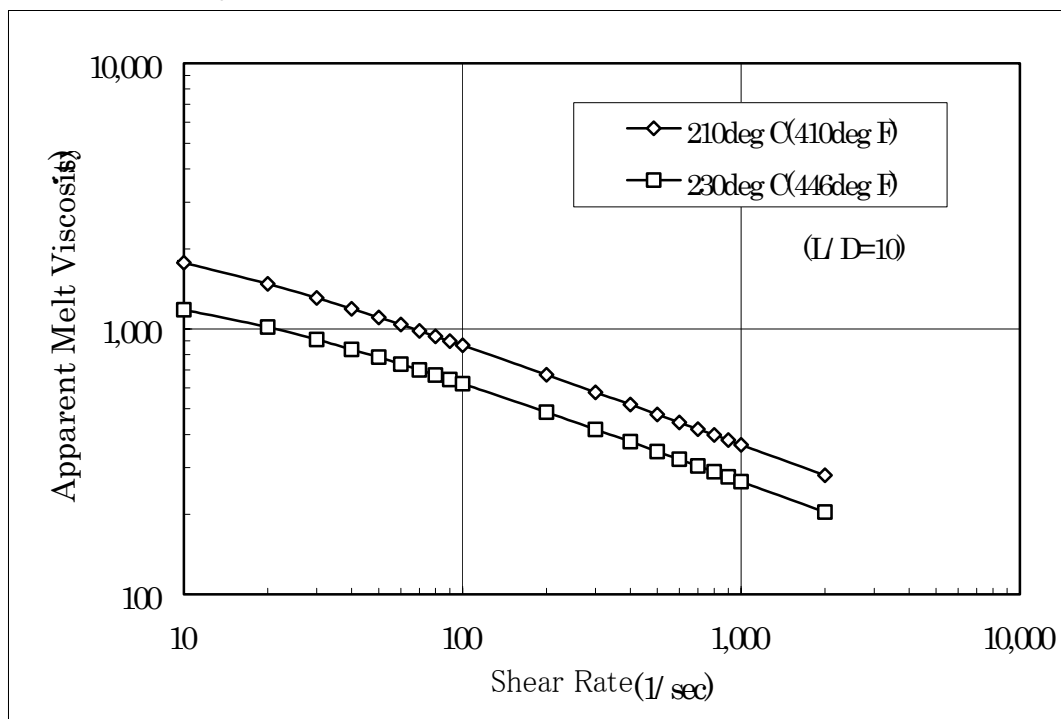


Fig.1 Melt Viscosity of Soarnol DC3212B

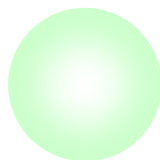
[Example of Processing]

- Extruder: 40 mm  $\phi$  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 <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	Head	Die
180	200	220	230	230	230	200-220
(356)	(392)	(428)	(446)	(446)	(446)	(392-428)





## [Hygienic Performance of Soarnol DC3212B]

Soarnol DC3212B contains no heavy metals or other harmful substances.  
Soarnol DC3212B 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

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<http://www.nichigo.co.jp/>

