



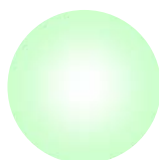
Soarnol®

ETHYLENE-VINYLAALCOHOL COPOLYMER



E3808

38 mol% Ethylene Content



[General Description]

Soarnol E3808 is one of the standard grades of “Soarnol®”, its ethylene content is 38 mol% with an intermediate MFR(melt flow rate).

Soarnol E3808 has both excellent barrier to gases as well as water resistance. This resin primarily used in coextruded film and coextrusion coating applications. Furthermore, it can also be used in thermoforming and shrink packaging.

[General Properties]

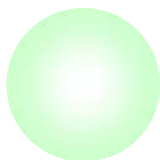
<i>Property</i>	<i>Unit</i>	<i>Value</i>
Ethylene Content	mol%	38
MFR ¹⁾ (@210°C, 2160g)	g/10min	8
Volatile Matter	%	< 0.3
Melting Point ²⁾	deg C	173
Crystallization Temperature ²⁾	deg C	152
Oxygen Permeability ³⁾	cc 20 μ m / m ² day atm	0.7
20deg C-65%RH	cc·mil/100inch ² ·day·atm	0.036
WVTR	g 30 μ m / m ² 24hrs	23-35
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]

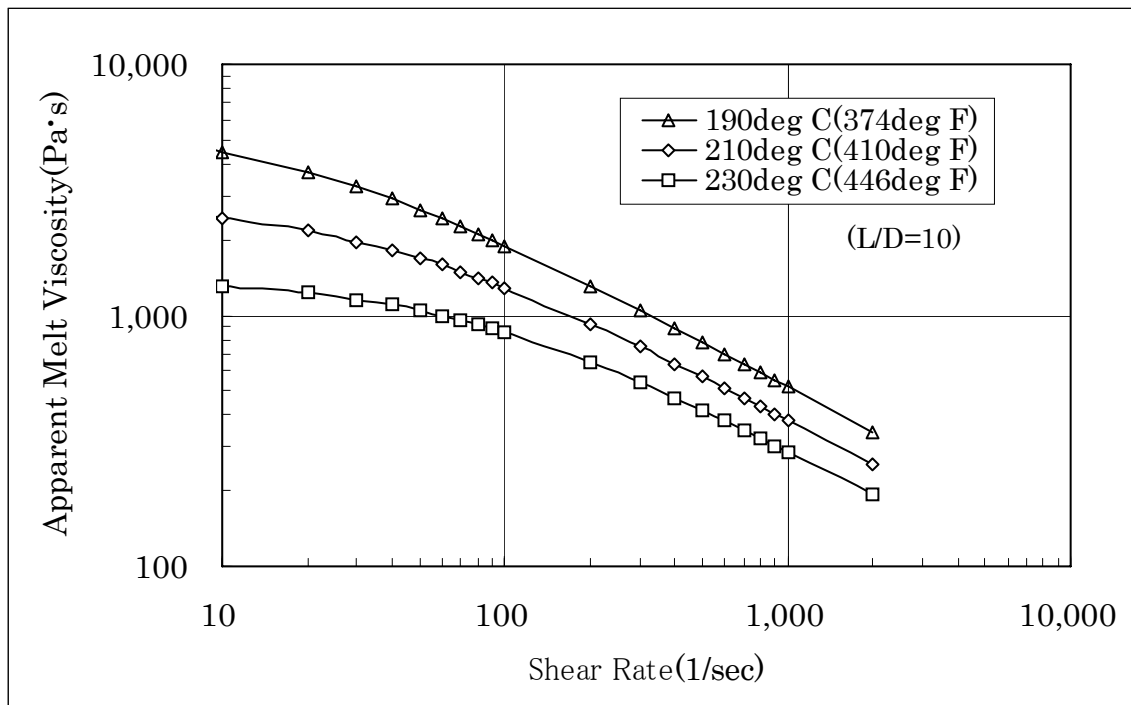


Fig.1 Melt Viscosity of Soarnol E3808

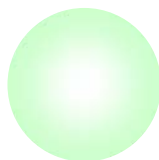
[Example of Processing]

- 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
170	190	210	220	220	220	190-220
(338)	(374)	(410)	(428)	(428)	(428)	(374-428)





[Hygienic Performance of Soarnol E3808]

Soarnol E3808 contains no heavy metals or other harmful substances.

Soarnol E3808 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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