

G-SoarnoL™ GC3304B

ETHYLENE VINYL ALCOHOL COPOLYMER (EVOH)

Application

G-SoarnoL™ is a special EVOH, whose crystallinity and melting point can be controlled. G-SoarnoL™ has excellent orientability and shrinkability while keeping its excellent gas barrier property. G-SoarnoL™ GC3304B is ethylene content 33 mol% with high gas barrier property. This grade is suitable for orientation applications such as thermoformable film and shrink bag with double bubble process.

General Properties

| Properties | Unit | Value |
|--|---|--------------|
| Ethylene Content | mol% | 33 |
| MFR ¹⁾ (210 degree C, 2160g) | g/10min | 4.0 |
| Volatile Matter | % | < 0.3 |
| Melting Point ²⁾ | degree C | 170 |
| Crystallization Temp. ²⁾ | degree C | 142 |
| Glass Transition Temp. ²⁾ | degree C | 58 |
| Density ³⁾ (23 degree C) | g/cm ³ | 1.18 |
| Oxygen Permeability ⁴⁾ (20 degree C x 65%RH) | cc.20μm / m ² .day.atm cc.mil / 100inch ² .day.atm | 0.4 0.020 |

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

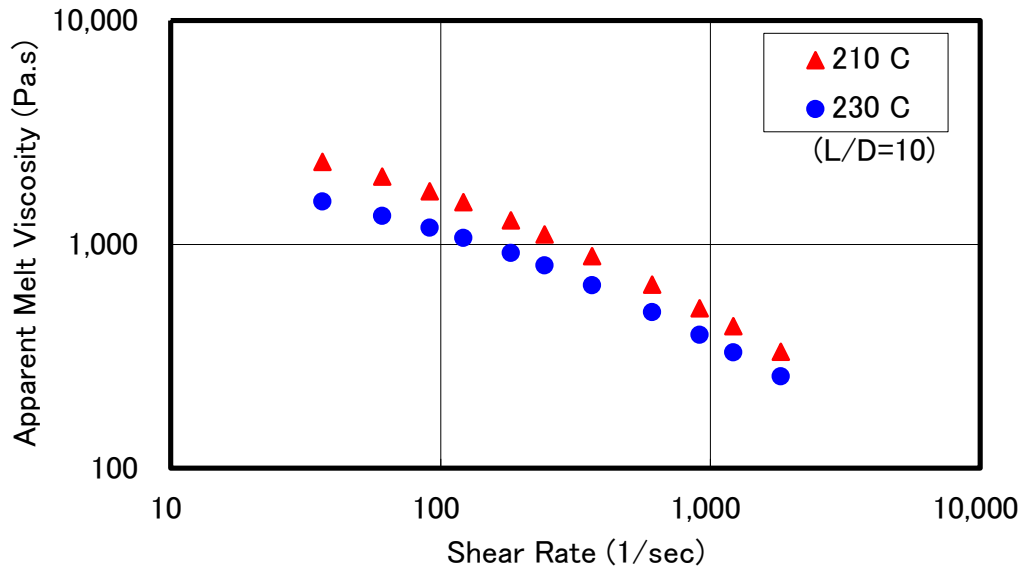


Fig. 1 Melt Viscosity of G-Soarnol™ GC3304B

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 | 170-200 | 185-210 | 200-230 | 200-230 | 200-230 | 200-230 |
| deg.F | 338-392 | 365-410 | 392-446 | 392-446 | 392-446 | 392-446 |

Quality and Safety for Application of G-Soarnol™ GC3304B

High quality G-Soarnol™ is produced by Okayama plant in Japan. Okayama plant is certified to meet the requirement of ISO 9001.

G-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 G-Soarnol™ brands or for food hygiene conformity in other countries.

U.S.A : US FDA FCN749

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

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