

Soarnol™ BX6304B

ETHYLENE VINYL ALCOHOL COPOLYMER

High barrier and Good Thermoforming Property

Application

Soarnol™ BX6304B is a special grade for thermoforming that has a wide thermoforming process window with high barrier to gases. Soarnol™ BX6304B is appropriate for film & sheet / thermoforming applications.

General Properties

| Properties | Unit | Value |
|--|---|--------------|
| Ethylene Content | mol% | 29 |
| MFR ¹⁾ (210 degree C, 2160g) | g/10min | 4.7 |
| Volatile Matter | % | < 0.3 |
| Melting Point ²⁾ | degree C | 188 |
| Crystallization Temp. ²⁾ | degree C | 163 |
| Glass Transition Temp. ²⁾ | degree C | 62 |
| Density ³⁾ (23 degree C) | g/cm ³ | 1.20 |
| 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

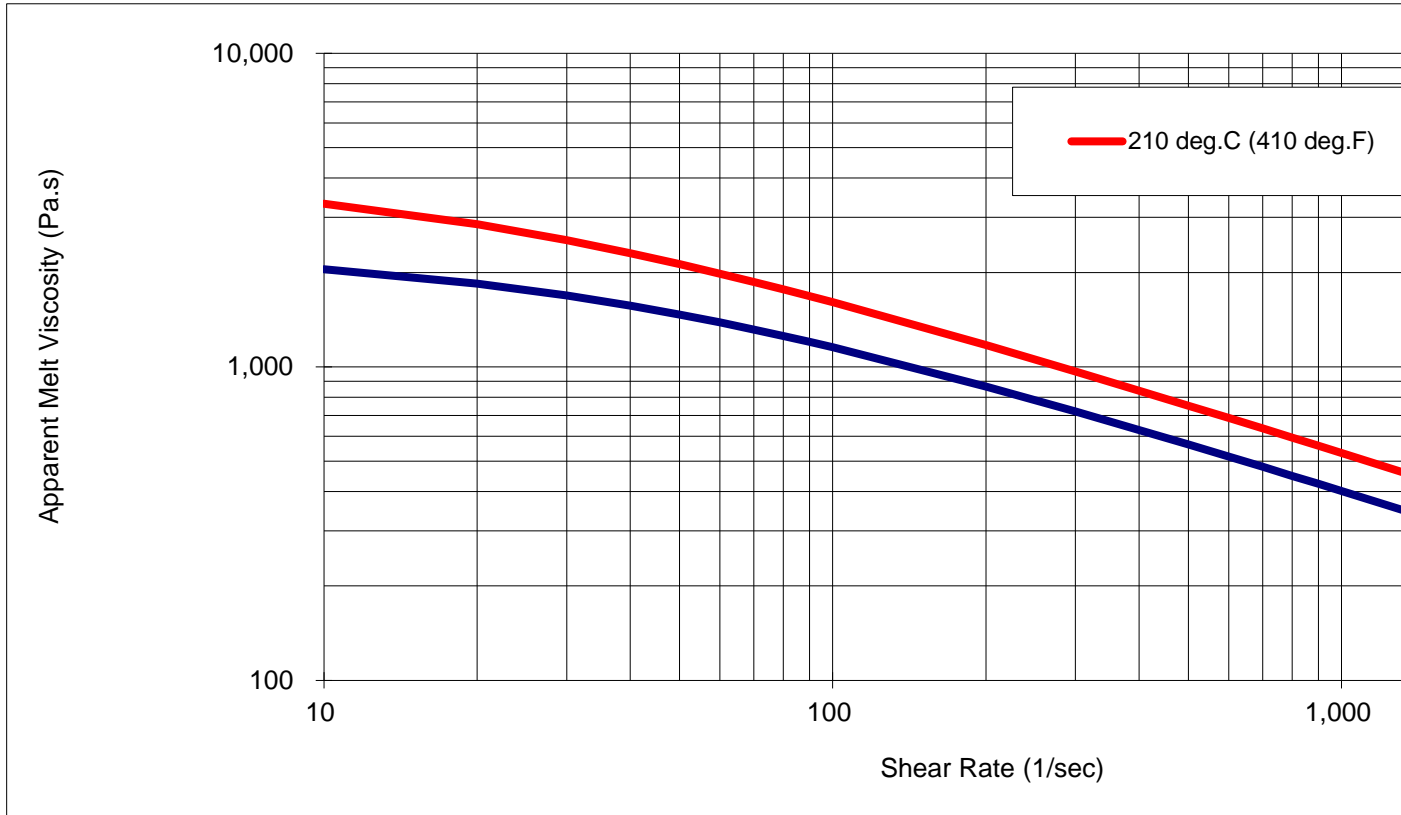


Fig. 1 Melt Viscosity of Soarnol™ BX6304B

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 |

Revised date on Apr. 1st 2020

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|-------|---------|---------|---------|---------|---------|---------|
| deg.F | 374-410 | 392-428 | 410-446 | 410-446 | 410-446 | 410-446 |
|-------|---------|---------|---------|---------|---------|---------|

Quality and Safety for Application of Soarnol™ BX6304B

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

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