

Soarnol™ DC3205HB

ETHYLENE VINYL ALCOHOL COPOLYMER

Modified Soarnol™ for the hot-water under floor heating pipe

Application

Soarnol™ DC3205HB is a special grade of Soarnol™, its ethylene content is 32 mol% with an intermediate MFR (melt flow rate). Soarnol™ DC3205HB has a better thermal durability, therefore it can be used as the oxygen barrier component of the under floor heating pipe.

General Properties

Properties	Unit	Value
Ethylene Content	mol%	32
MFR ¹⁾ (210 degree C, 2160g)	g/10min	5.5
Volatile Matter	%	< 0.3
Melting Point ²⁾	degree C	183
Crystallization Temp. ²⁾	degree C	160
Glass Transition Temp. ²⁾	degree C	61
Density ³⁾ (23 degree C)	g/cm ³	1.19
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.

Revised date on Apr. 1st 2020

Melt Viscosity

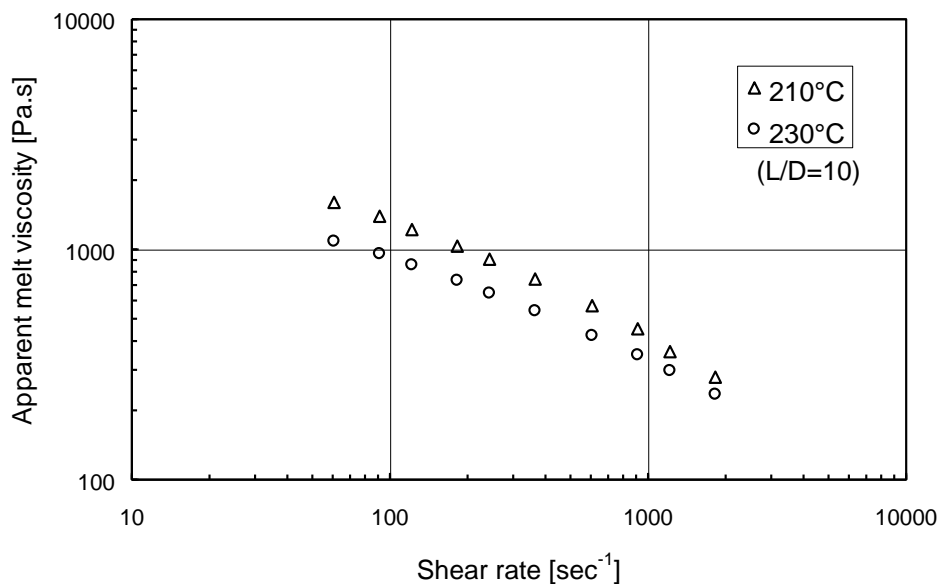


Fig. 1 Melt Viscosity of Soarnol™ DC3205HB

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

Heat resistance for pipe

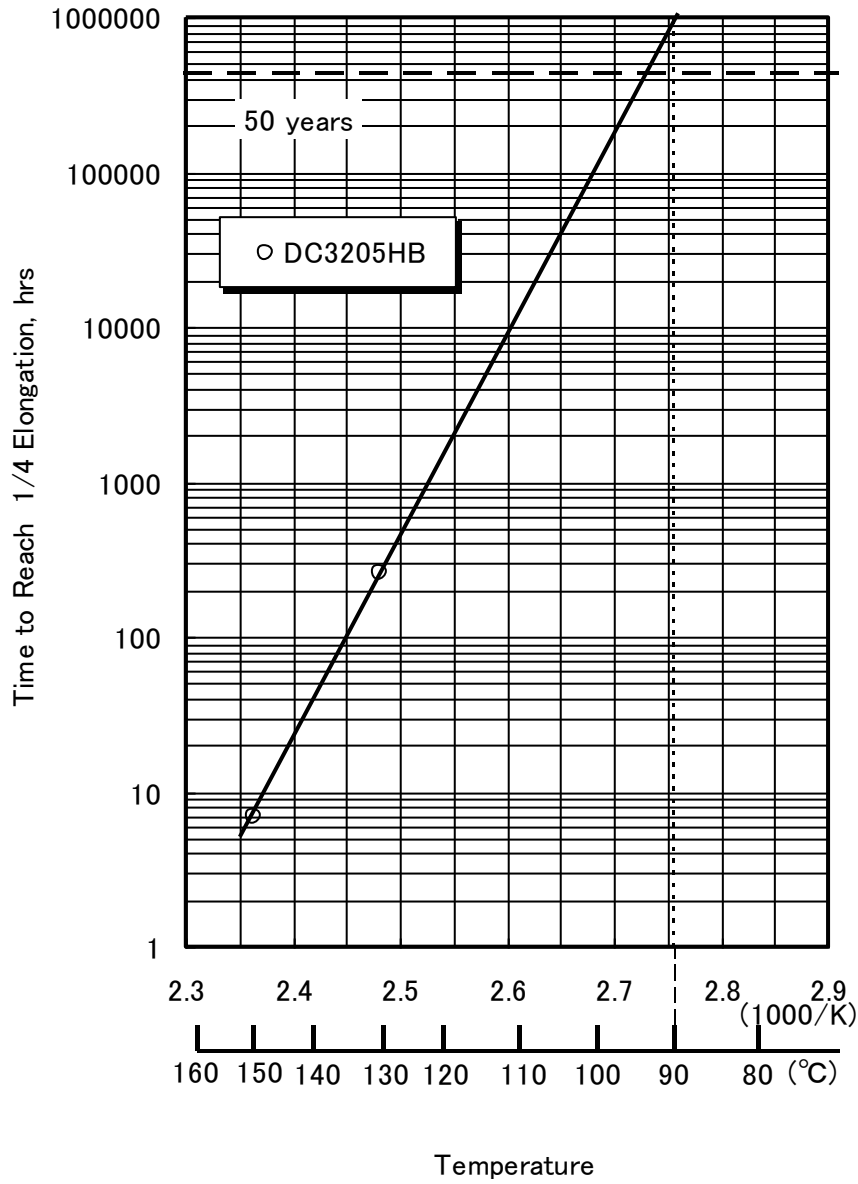


Fig. 2 Thermal Durability of Soarnol DC3205HB

Quality and Safety for Application of Soarnol™ DC3205HB

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.

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