

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.

Melt Viscosity

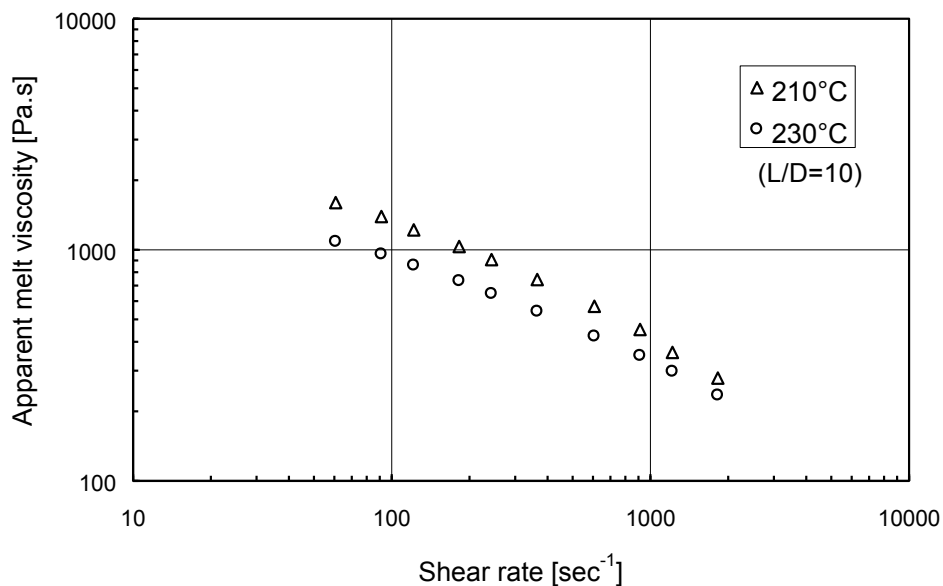


Fig. 1 Melt Viscosity of SoarnoL™ DC3205HB

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

Revised date on 14 Apr. 2017

Heat resistance for pipe

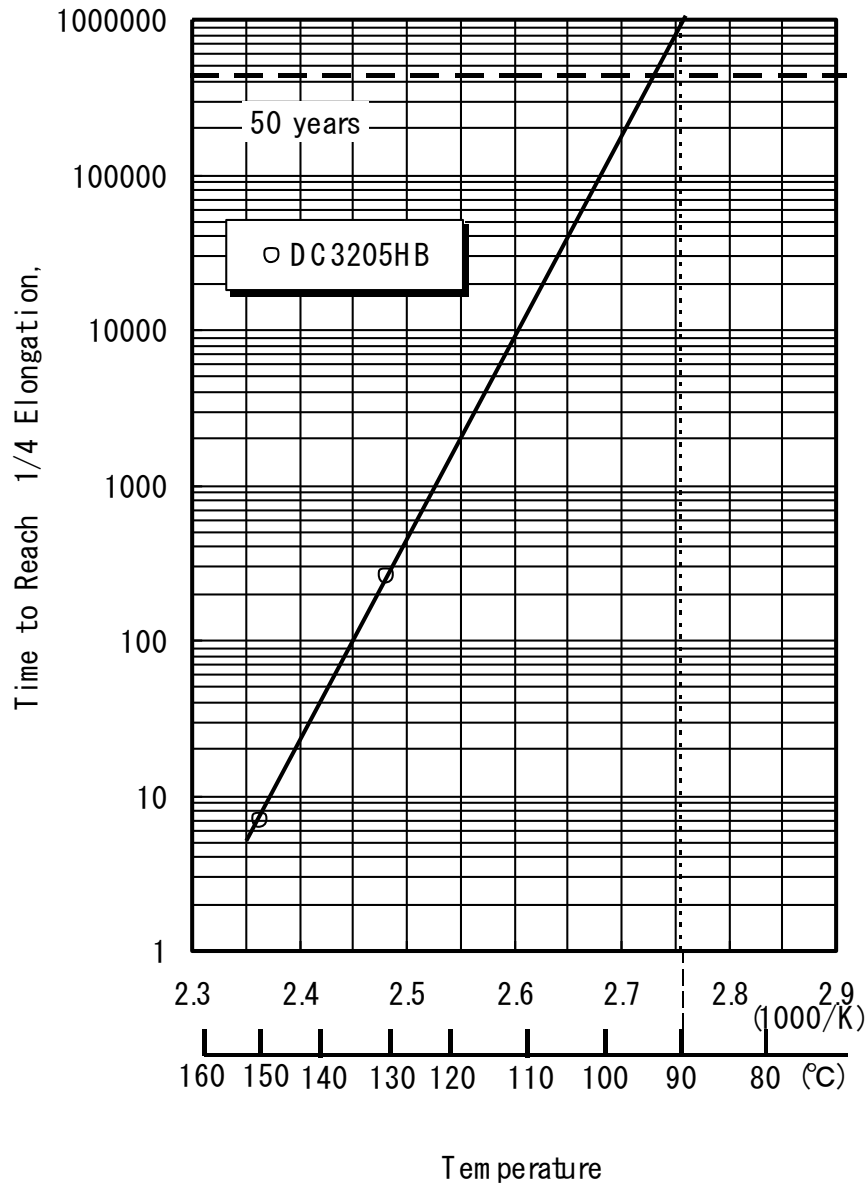


Fig. 2 Thermal Durability of Soarnol DC3205HB

Revised date on 14 Apr. 2017

Quality and Safety for Application of Soarnol™ DC3205HB

High quality Soarnol™ is produced by Mizushima 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™ Contacts

Soarus L.L.C	3930 Ventura Drive, Suite 355, Arlington Heights, IL 60004, USA TEL +1-847-255-1211 FAX +1-847-255-4343
NIPPON GOHSEI Head Quarters	Osaka FUKOKU SEIMEI BUILDING, 2-4 Komatsubara-cho, Kita-ku Osaka 530-0018, Japan TEL +81-6-7711-5424 FAX +81-6-7711-5452
NIPPON GOHSEI Europe GmbH	Merowingerplatz 1a, D-40225, Duesseldorf, Germany, Life Science Center TEL +49-211-385488-0 FAX +49-211-385488-29
NICHIGO SHANGHAI Co., Ltd.	Room 904, The Center, No.989 Chang Le Road, Shanghai 200031, China TEL +86-21-5407-6333 FAX +86-21-5407-6038
NIPPON GOHSEI ASIA PACIFIC PTE. LTD.	60 Anson Road, #10-01, Mapletree Anson, Singapore 079914 TEL +65-6603-4728 FAX +65-6509-9400
Processing-Technique Development Center	8-1, Matsue 4-chome, Kurashiki, Okayama 712-8052, Japan TEL +81-86-455-5214 FAX +81-86-455-5289

URL: <http://www.soarnol.com/>
<http://www.soarus.com/>
<http://www.nichigo.co.jp/>