

# **SoarnoL™ TF2905B**

## **ETHYLENE VINYL ALCOHOL COPOLYMER**

Excellent Thermoforming Property

### Application

SoarnoL™ TF2905B is a special grade for thermoforming that has a wide thermoforming process window with high barrier to gases.

SoarnoL™ TF2905B is specifically designed for thermoforming applications using polystyrene and polyethylene structural layers.

### General Properties

Properties	Unit	Value
Ethylene Content	mol%	29
MFR <sup>1)</sup> (210 degree C, 2160g)	g/10min	5.0
Volatile Matter	%	< 0.3
Melting Point <sup>2)</sup>	degree C	188
Crystallization Temp. <sup>2)</sup>	degree C	163
Glass Transition Temp. <sup>2)</sup>	degree C	62
Density <sup>3)</sup> (23 degree C)	g/cm <sup>3</sup>	1.19
Oxygen Permeability <sup>4)</sup> (20 degree C x 65%RH)	cc.20μm / m <sup>2</sup> .day.atm cc.mil / 100inch <sup>2</sup> .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

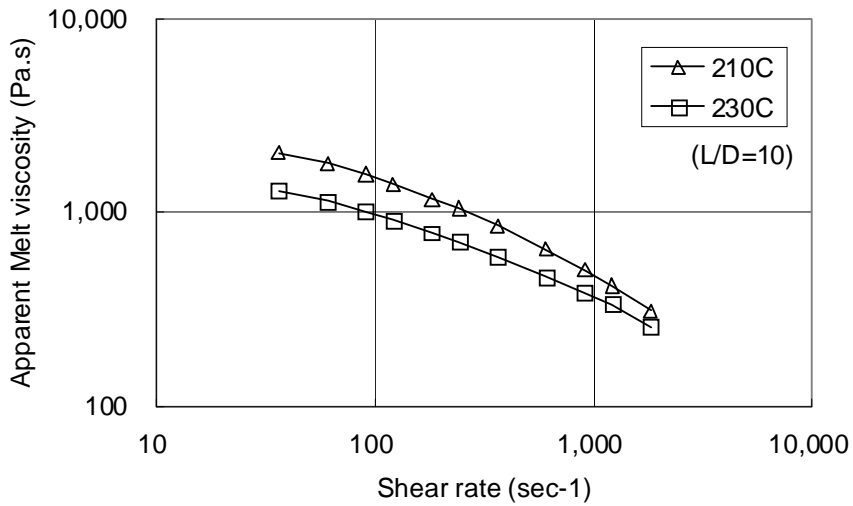


Fig. 1 Melt Viscosity of Soarnol™ TF2905B

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 (degree C)

C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	AD
190-210	200-220	210-230	210-230	210-230	210-230

## Quality and Safety for Application of Soarnol™ TF2905B

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™ meets the Food Sanitation Standards of various countries.

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)

U.S.A : US FDA 21, C.F.R. 177.1360

EU : Commission Regulation (EU)No. 10/2011 and its amendments

---

### Soarnol™ Contacts

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
Soarus L.L.C	3930 Ventura Drive, Suite 440, Arlington Heights, IL 60004, USA TEL +1-847-255-1211 FAX +1-847-255-4343
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 GOSEI (THAILAND) Co., Ltd.	183 Regent House Building., 18 <sup>th</sup> Floor, Rajadamri Road, Lumpini, Pathumwan, Bangkok 10330, Thailand TEL +66-2-251-1569 FAX +66-2-255-2824
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.nichigo.co.jp/>