Zeotherm
Thermoplastic Vulcanizates

Zeotherm® 131-90B

Tentative Product Data Sheet

Product Description

A high-performance thermoplastic vulcanizate (TPV) designed to survive air, oil and grease exposure. Heat-stabilized to survive long-term exposure to 150°C (300°F) and repeated short-term exposure to 175°C.

Composition

TPV based on polyacrylate elastomer dynamically vulcanized in a matrix of polyamide (nylon) plastic.

Key Features

- Excellent heat resistance (sustained at 150°C / 300°F; excursions to 175°C / 350°F).
- Excellent resistance to many mineral + synthetic motor oils, transmission fluids, and greases.
- Low temperature performance to -40°C.
- Bondable to polyamides via overmolding (insert and 2-shot), hot-plate welding, and co-extrusion.
- Optimized for large-scale blow molding processes (conventional extrusion; co-extrusion; 3D; suction; sequential).

Product Characteristics

Physical Form	Free-flow pellets
Color	Black
Packaging	50 lbs (22.7 kg) moisture-barrier bags

Physical Properties	Nominal Values	Test Method
Density - Specific Gravity	1.1	ASTM D792
Durometer (Type A, 15 sec)	92 Points	ASTM D2240
Tensile Strength at Break	14 Mpa	ASTM D412
Elongation at Break	240%	ASTM D412
Low Temperature		
Gehman, T10	-45°C	ASTM D1053
Brittle Point	-44°C	ASTM D2137
Melt Temperature	220°C (428°F)	--

Heat Aging Properties	Nominal Values
Properties After 504h, 150°C -- Air	
- Tensile Strength, Change:	-10%
- Elongation at Break, Change:	-35%
- Hardness, Change:	-3 Points
Properties After 72h, 175°C -- Air	
- Tensile Strength, Change:	-2%
- Elongation at Break, Change:	-31%
- Hardness, Change:	-3 Points

Product Notes

Values noted above are for injection molded samples. **Values are typical properties and should not be construed as specifications.**

Processing Statement

Zeotherm can be processed using thermoplastic blow molding or extrusion equipment. Zeotherm should be dried in a desiccant dryer prior to use. Processing guidelines for Zeotherm and instructions for handling of purged material can be found on-line at: www.zeotherm.com/processing. Zeotherm can be readily recycled -- both in-process and post-consumer.

SAE Line Callout (Tentative)

SAE J2558 TPV (A35324 BS2490 DA92 EO351351D EL175 F40 SGC1120 TMA7 TS11)
Please contact Zeon's offices prior to finalizing an automotive specification based on this callout.

For Additional Information

Phone: 800.735.3388 / +1 502.775.2000
Email: zeotherm@zeonchemicals.com
Web: www.zeotherm.com

Revision History

Revised: 3-Oct-2007

ZEON CHEMICALS L.P.

4111 Bells Lane, Louisville, KY 40211 USA Phone 502.775.2000 Fax 502.775.2025