

# **THERBAN® LT**

# A broad range of grades to cover all low temperature requirements

The acrylonitrile (ACN) content is a crucial factor determining the properties of Therban® compounds. High levels of ACN result amongst others in excellent oil and media resistance. However, at the same time low temperature flexibility is reduced due to the increase of the glass transition temperature caused by the higher ACN content.

For several low temperature applications the flexibility and excellent compression set at temperatures below -30 °C are more important than volume swell. The Therban® LT grade range has been developed for these applications.

The current portfolio has been expanded from 25 % ACN over 20 % ACN to 17% ACN to meet all requirements. The optimal product for volume swell and low temperature properties can be chosen from this broad range.

### Therban® LT

The answer to your needs when low temperature flexibility is key for the product performance

- A broad range of Therban® grades for usage at temperatures below -30°C
- Balanced properties between oil resistance and low temperature flexibility
- Full or partial saturation at 5.5 %
- Mooney viscosity ML(1+4)100 °C from 39 to 80 MU
- Optimal material available for every requirement

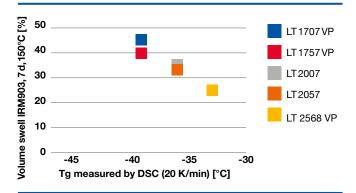
# Therban® LT grade slate

		sity	le bonds		<b>5</b> 0
	Acrylonitrile % ACN	Mooney viscosity ML 1+4 (100°C)	Residual double bonds % RDB	Sulfur curing	Peroxide curing
Therban® LT 1707 VP	17	74	≤0.9		
Therban® LT 1757 VP	17	70	5.5		
Therban® LT 2007	21	74	≤0.9		
Therban® LT 2057	21	67	5.5		
Therban® LT 2157	21	70	5.5		
Therban® LT 2568 VP	25	80	5.5		
Therban® AT LT 2004 VP	21	39	≤0.9		

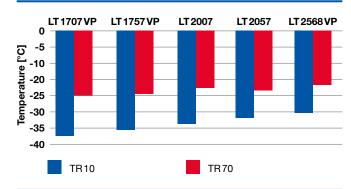
VP = Versuchsprodukt = trial product / Standard packaging: 25kg bales / 500 kg skid / Film wrap: 0.08 mm thick, PE/EVA dispersible/strippable 85-110°C melt. pt., blue (not strippable for AT)



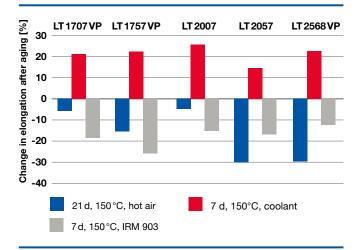
# Tg versus swell, influence of ACN content



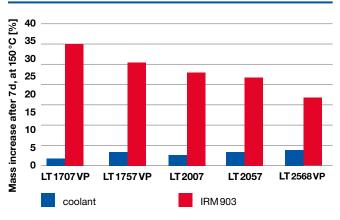
# Low temperature properties – improvement TR-10



# Aging in different media



### Oil and media resistance



Higher swell of Therban® LT 1707 VP and LT 1757 VP reflects lower ACN content

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(VP = Versuchsprodukt = trial product). The information contained herein is merely preliminary. Tes ting as to properties and applications is not final. Further information, including data which could change or add hazards with use, may be developed by the manufacturer, the user or a third-party institute. Such information may be needed to properly evaluate or use this product. Use is undertaken at the sole risk of the user.

#### Quality & Environmental Management:

Therban® is produced under strict control regarding safety, environmental protection and quality. The whole supply chain, from production to customer service, is covered by ISO 9001 and ISO 14001 certification

Product Safety:
Relevant safety data and references as well as the necessary hazard warning labels can be found in the Material Safety Data Sheet.

#### Health and Safety Information:

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling the ARLANXEO products mentioned in this publication. For materials mentioned which are not ARLANXEO products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be followed Before working with any of these products, you must read and become familiar with the available before Working with any of uses produces, you must read a find become raining with the available information on their hazards, proper use and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets and product labels. Consult us through your ARLANXEO representative or the Health, Safety, Environment and Quality Department (HSEQ) of ARI ANXEO

Regulatory Compliance Information:
Some of the end uses of the products described in this publication must comply with applicable regulations, such as the FDA, BfR, NSF, USDA and CPSC. If you have any questions on the regu-latory status of these products, contact your ARLANXEO representative. The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information the dark reproducts to which you but and utilize our products, technical assistance and informations (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include tes-ting to determine suitability from a technical as well as health, safety, and environmental standpoints. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale, which can be found at the ARLANXEO homepage. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material of its use. No license is implied or in fact granted under the claims of any patent.

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