

Nitrile Butadiene Rubber

DISCOVER OUR PRODUCT PORTFOLIO

[Baymod® L](#) [Baymod® N](#) [Baypren®](#) [Buna®](#) [Keltan®](#) [Krynac®](#) [Levamelt®](#)

[Levapren®](#) [Perbunan®](#) [Taktene®](#) [Therban®](#) [X Butyl®](#)

ABOUT ARLANXEO

ARLANXEO is a world-leading synthetic elastomer company with its headquarters in The Hague, the Netherlands. Since December 31st, 2018, the company is a wholly-owned subsidiary of Saudi Aramco, a leading producer of energy and chemicals, based in Dhahran, Saudi Arabia. ARLANXEO develops, produces and markets high-performance elastomers that are used for a wide range of applications in the automotive and tire industry, building and construction, oil and gas industries as well as for consumer goods and the pharmaceutical sector.

Our production sites, research and development facilities and business offices span the globe to be close to our customers, maintain short transportation routes and assure high delivery reliability. Our world-scale plants produce efficiently, flexibly and sustainably – in Europe, Asia and North and South America.

As a competent and reliable partner of our customers, we deliver tailor-made solutions that reflect our high standards of quality, innovation, safety and sustainability. ARLANXEO offers a broad product lineup for highest requirements. We aim to create significant value for our customers and shareholders by applying best practices, using best-in class technologies and constantly striving for new and better solutions – for first-class products and services.

ABOUT ARLANXEO

THE ADDED VALUE OF ARLANXEO

GRADES CHARACTERISTICS & APPLICATIONS

KRYNAC®

PERBUNAN®

BAYMOD® N

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THE ADDED VALUE OF ARLANXEO

Added value is what we provide over and above supplying our products. The services our people deliver throughout ARLANXEO are your added value.

Our know-how in recipe formulation

With our deep understanding of material properties and customer requirements, we develop products and recipe formulations that deliver the right solutions for our customers.

Our innovation in compounding and mixing

In our technical centers around the world we work on improving compounding and processing solutions to meet customer demands for efficiency and performance.

Our track record in product quality and consistency

Through our deep understanding of polymer science and the application of quality assurance techniques, we are able to offer a high product quality consistency.

Our experience in product performance in final applications

We provide deep technical know-how from the molecular architecture to the right performance characteristics in the end product. We work side-by-side our customers, developing products that meet tomorrow's requirements.

Our understanding of regulations and approvals

Based on the ISO 9001 standard, we implement key elements from essential automotive, food and pharma application standards and are implementing certification for environment, sustainability and energy. This will increase speed to market and our customers' advantage. Our Regulatory Affairs & Product Safety team is monitoring changing regulations and works to adapt our products and solutions to meet requirements.

Our deep knowledge-base across our broad elastomer portfolio and its global production

We have one of the broadest portfolios in the industry allowing our customers to source multiple high quality elastomer solutions whilst streamlining procurement contracts and logistics across continents.

GRADES CHARACTERISTICS & APPLICATIONS

Krynac® Perbunan® Baymod® N

ARLANXEO is a leading global supplier of high quality nitrile butadiene rubber (NBR) and offering an extensive portfolio with three brands **Krynac®**, **Perbunan®** and **Baymod® N**. These brands of high performance NBR cover the broad variety of ratio between the non-polar monomer butadiene (50 % – 82 %) and the polar monomer acrylonitrile (18 % – 50 %). ARLANXEO meets therefore your demands related to both excellent low temperature flexibility and exceptional resistance to swelling in oils, fuels and greases.

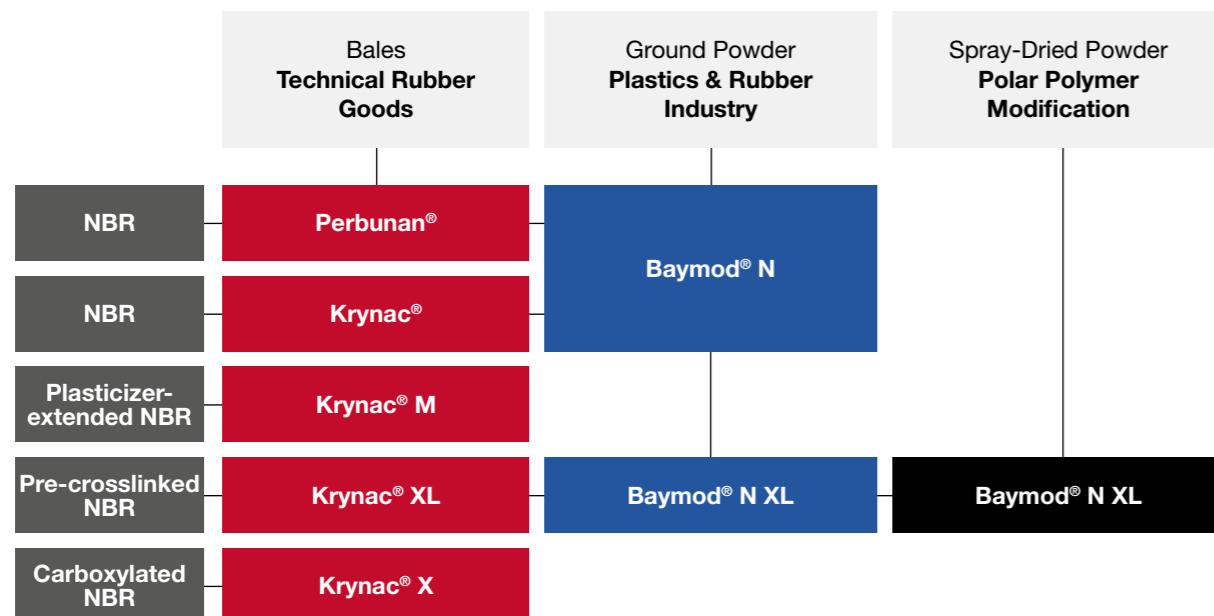
ARLANXEO – Global Leader in NBR

- Largest NBR capacity producer
- Leading quality and technology position
- Global sales force and technical service

Philosophy of ARLANXEO

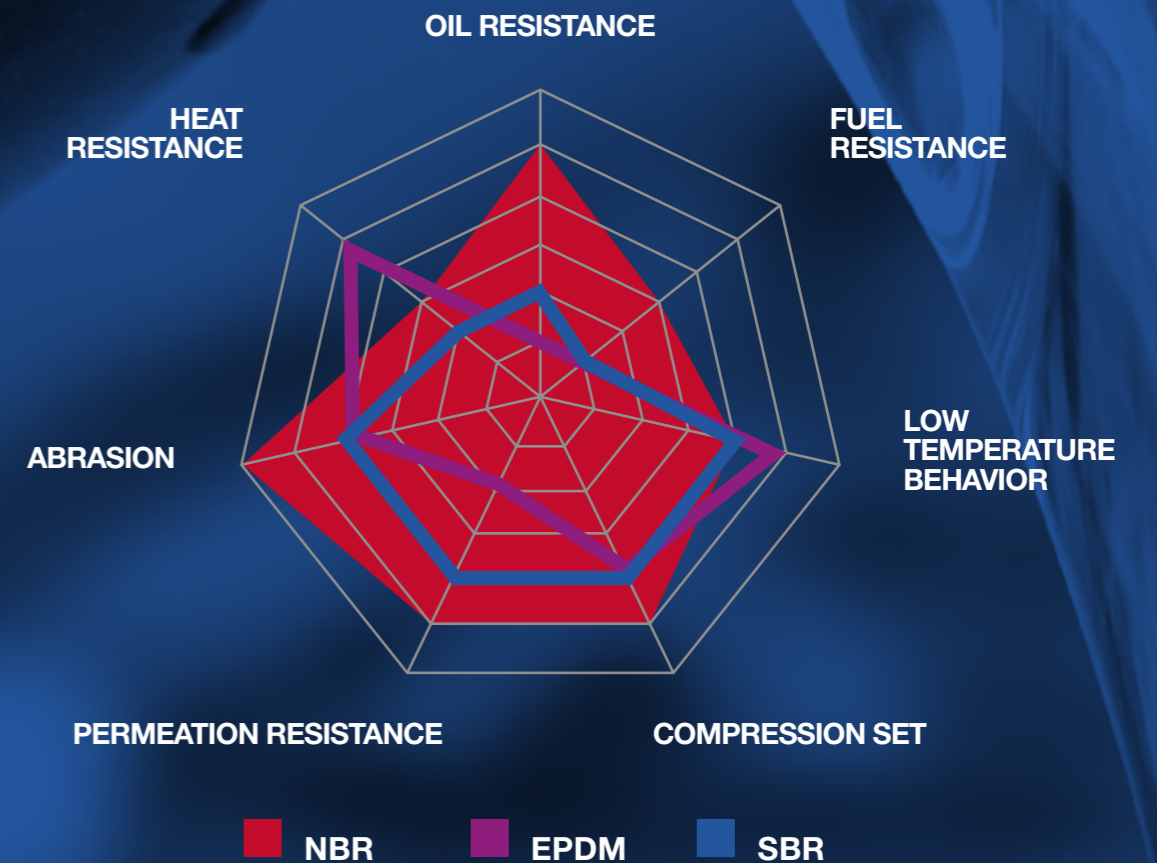
- Be the NBR partner for our customers
- Design NBR for our customers
- Make our customers successful

ARLANXEO NBR portfolio



SELECTED PROPERTIES OF NBR – COMPARISON WITH EPDM AND SBR

The diagram below provides an overview of the properties/performance of NBR compared to other broadly used elastomers. NBR surpasses these polymers in regard to its resistance to oils, fuels and greases but also to gas permeability, abrasion and wear. Its sealing force retention is better, too.



GRADES CHARACTERISTICS & APPLICATIONS

Krynac®

Oil resistant, multi-purpose polymer for technical rubber products

- Exceptional resistance to swelling in oils, fuels and greases
- Excellent low temperature flexibility and heat resistance
- Good processing safety
- Very good extrusion performance and extreme resistance to abrasion and wear

Krynac®s extreme resistance to oily liquids makes it suitable for a wide range of applications. Its extreme resistance to these liquids makes it suitable for a wide range of applications. Moreover, specially produced **Krynac®** grades feature pre-crosslinked, plasticizer extended and carboxylated types leading to very good extrusion performance, great processing safety and excellent resistance to abrasion and wear, respectively. Lastly, a **Krynac®** low-emission grade completes the portfolio.

APPLICATIONS

Krynac® is used in various applications for the automotive and industrial equipment, machinery, shoe soles and flooring. Among many areas of applications it is preferably used for hoses, seals and membranes as well as for roll covers, coated fabrics, sheets, thermal insulation tubes and footwear.



KRYNAC® FACT SHEET

- Multi-purpose polymer with medium-speed cure
- Scorch safety improves processing behavior
- Special characteristics provided by pre-crosslinked, carboxylated, plasticizer extended and low-emission grades
- Various applications for the automotive, industrial equipment & machinery industries, shoe soles, flooring and oil & gas



Perbunan®

Oil resistant, fast-curing polymer for technical rubber products

- Exceptional resistance to swelling in oils, fuels and greases
- Excellent low temperature flexibility and heat resistance
- Quick processing - very short molding cycles Reduced tendency toward mold fouling and corrosion
- Low migration and extraction level in food applications

Perbunan® is a fast-curing NBR rubber enabling very quick molding cycles. Besides their extreme oil resistance, vulcanizates are characterized by a high modulus and a good sealing force retention. The clean **Perbunan®** grades are – among other properties – designed for molding applications with a reduced tendency toward mold fouling. In addition they are suitable for food and potable water applications.

APPLICATIONS

Perbunan® is suitable for a wide range of applications. It is preferably used for molded rubber parts such as seals, membranes, vibration dampers and pump stators. Furthermore it is also suitable for rubberized fabrics, hoses, roll covers, sheets, conveyor and transmission belts, shoe soles among other applications.



PERBUNAN® FACT SHEET

- Special fast-curing polymer
- High modulus and good sealing force retention
- Clean grades designed for injection molding
- Ideal for products in automotive-, construction and machinery industries as well as for food contact applications

Baymod® N

Powdered nitrile butadiene rubber serving as non extractable and 'ready to use' modifier

- Excellent chemical, oil and hydrolysis resistance
- Enable permanently flexible, elastic and impact resistant compounds
- Permanently flexible, elastic and impact resistant
- Good low-temperature flexibility and low fatigue
- Doesn't migrate from compound
- Improved coefficient of friction in brake applications

Baymod® N serves as a powdered modifier in thermoplastics resins, in the final product, the resistance to oils, fuels and greases. Its free flowability ensures automatic metering and processing. It is highly compatible with other polar base polymers such as PVC or Phenolic Resins. Thermoplastics modified with **Baymod® N** remain permanently flexible and elastic (**Baymod® N** being not extractable) while also being impact-resistant.



APPLICATIONS

Pre-crosslinked **Baymod® N** grades provide excellent dimensional stability in extruded soft PVC profiles. In friction materials, they serve as an excellent binder for both fillers and fibers and improves the coefficient of friction. Linear **Baymod® N** grades are soluble in wet processes and therefore used by the rubber industry for gaskets manufactured in a solution process. Additionally, they are used for wet processes in the friction industry as a binder that improves the impact resistance. In the plastic industry they are also implemented for soft PVC in injection molding processes.



BAYMOD® N FACT SHEET

- Free flowability ensures automatic processing
- Highly compatible with different polar base polymers (PVC, Phenolic Resin)
- Pre-crosslinked grades provide dimensional stability and serve as an excellent binder
- Linear grades are soluble and hence used in wet solution processes.



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Trial Product:

(VP = Versuchsprodukt = trial product). The information contained herein is merely preliminary. Testing 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:

All ARLANXEO products are 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 possibly necessary warning labels are to be found in the corresponding safety data sheets.

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 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.

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 regulatory 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 (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, is 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 testing to determine suitability from a technical as well as health, safety, and environmental standpoint. 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. 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.

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