



CHARACTERISTIC	NR	CR	EPDM	NBR	VMQ	PU	CSM	FPM
Min. temp use in °C	-25	-10	-40	-10	50	-25	-10	-25
Max. temp use in °C	70	80	110	110	200	70	110	200
Tensile strength	■	■	■	■	■	■	■	■
Elongation resistance	■	■	■	■	■	■	■	■
Abrasion resistance	■	■	■	■	■	■	■	■
Tear strength	■	■	■	■	■	■	■	■
Oil resistance	■	■	■	■	■	■	■	■
Resistance to animal oil-fats	■	■	■	■	■	■	■	■
Water absorbiton	■	■	■	■	■	■	■	■
Resistance to vegetal oils	■	■	■	■	■	■	■	■
Resistance to acid-diluted	■	■	■	■	■	■	■	■
Resistance to hydrocranos	■	■	■	■	■	■	■	■
Resistance to ketones	■	■	■	■	■	■	■	■
Resistance to laquer solvents	■	■	■	■	■	■	■	■
Weather resistance	■	■	■	■	■	■	■	■
Ozone resistance	■	■	■	■	■	■	■	■
Cold rebound	■	■	■	■	■	■	■	■
Hot rebound	■	■	■	■	■	■	■	■

NATURAL RUBBER NR

Natural rubber is also called caoutchouc. The leading rubber producers are in Asia. Rubber is harvested mainly in the form of the latex from the rubber trees. Latex is a milky, sticky, colloid drawn off by making incisions in the bark. The fluid is collected in vessels and then refined into rubber by commercial processing. Natural rubber is used extensively in many applications and products, either alone or in combination with other materials. In most forms it is extremely waterproof, has a high tear strength and has excellent resilience properties. Natural rubber has limited oil and solvent resistance.

POLYCHLOROPRENE RUBBER CR

Chloroprene is a colorless liquid, the monomer for the production of a synthetic rubber called polymer polychloroprene commonly known as Neoprene, which is the registered trademark of DuPont. The resistance of abrasion is excellent and CR shows little aging when exposed to sunlight. The high temperature rating combined with flame and oil resistance makes this material a common choice for the automotive sector.

ETHYLENE-PROPYLENE-DIENE MONOMER EPDM

Ethylene propylene diene monomer rubber is a synthetic rubber which is suitable for a wide range of applications. The M refers to its ASTM standard D-1418 classification, which includes rubbers having a saturated chain of the polyethylene type. EPDM is commonly used for sealing surfaces. Its mechanical and dynamic properties are between natural rubber and synthetic rubber. Always avoid long lasting contact of EPDM rubber and petroleum based products.

NITRILE-BUTADIENE RUBBER NBR

Nitrile rubber, also known as Buna-N is a synthetic rubber copolymer of acrylonitrile (ACN) and butadiene. Trade names may be Nipol, Krynac and Europrene. This compound provides outstanding resistance to any kind of oil. Of its lead benefits is resistance to aging in high temperatures. Abrasion and metal adhesion properties are also excellent. Nitrile rubber is less likely to cause allergic reaction to human than natural rubber. It can be harmed by esters, ketones and ozone.

SILICONE RUBBER VMQ

Silicone rubber is an elastomer (rubber-like material) composed of silicone—itsself a polymer—containing silicon together with carbon, hydrogen, and oxygen. Silicone rubber is generally non-reactive, stable, and resistant to extreme environments and temperatures from -50 °C to +250 °C while still maintaining its properties. It repels water and in terms of tear strength, tensile strength, compression set and elongation in extreme temperatures silicone rubber outperforms conventional rubbers. Can be used as electrical insulator, but most commonly used as a radiator hose. Oils, acids and concentrated solvents can attack the compound.

POLYURETHANE RUBBER PU

Polyurethane elastomers are a special compound developed to fulfill specific performance. It has excellent elongation and tensile strength, good abrasin and compression set properties. PU is also resistance to light, ozone and oxidation. Limitations are high temperature and acid, vapor and alkali resistance.

CHLOROSULPHONATED RUBBER CSM

Hypalon and CSM are a trademarked names by DuPont for chlorosulfonated polyethylene (CSPE). It is well known compound due to the resistance to chemicals, UV light and extreme temperatures. The excellent color stability and weather resistance makes this material very popular for the purpose of producing inflatable boots, roofing material, cable coating and several automotive parts.

FLUOROCARBON RUBBER FPM

This special fluoroelastomer plymer is commonly called as Viton, which is a registered trademark of DuPont. It was introduced to the market in 1957 to fulfill the intense needs of the aerospace industry. Due to its very high resistance to corrosive environments and to heat, - which may be more than 300 °C - this compound earned a stable reputation in several industries. Its resistance to fuel and other chemical harms is excellent. Viton is also suitable to meet FDA standards of the food industry.