DANA VICTOR REINZ™

Sealing Solutions
For Industrial Applications

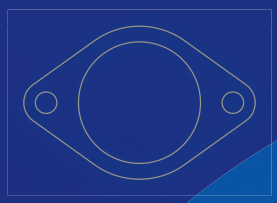
Reinz-Industrial.com

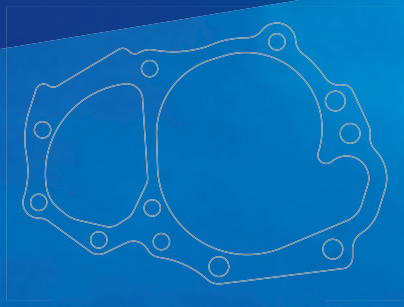
About
Dana's Industrial Sealing Solutions

Dana is a leading manufacturer of top-quality vehicle technology solutions that it develops and produces under the Victor Reinz® brand. Dana supplies a full-service range of outstanding sealing products on a global scale in three business areas – Original Equipment, Aftermarket, and Industrial.

The Industrial Sealing division develops and produces high-tech materials for gaskets as well as complete gasket solutions for industrial applications. From classic flange gaskets to individually designed high-pressure hydraulic gaskets, the Victor Reinz industry team presents an impressive profile with its customer-oriented consulting services, supplies the ideal gasket materials for specific applications, and offers comprehensive after-sales service. The portfolio covers more than 25 different sealing materials and is a reliable partner of well-known industrial companies.

Moreover, our technical consultants and applications engineers for Industrial Sealing Solutions provide professional support for strategic partners in the field of stamping. In addition to expert advice on the development and production of standardized gaskets, the company also provides the best materials – Dana handles complex gasket concepts, large-scale serial production, and special quality grades upon request.



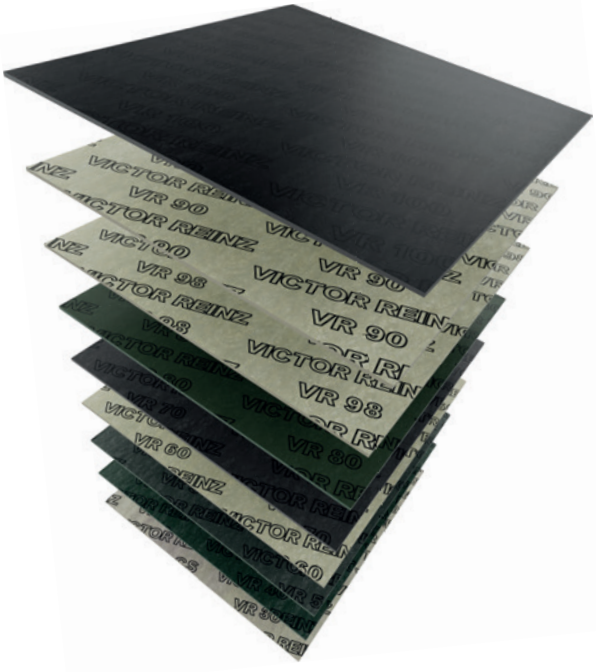


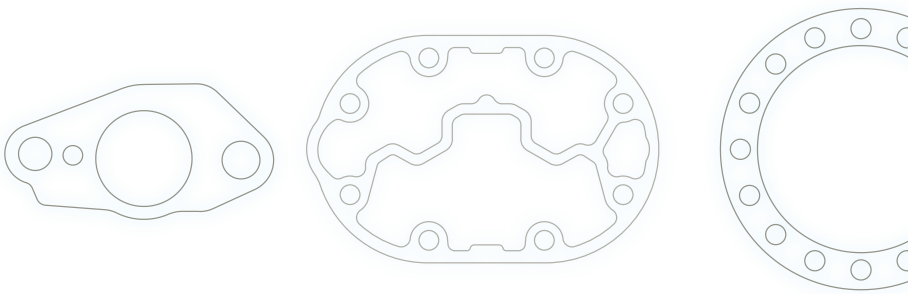
On Site
Distribution and Logistics

Dana provides professional support to industrial end customers and to gasket fabricators. We provide the ideal material and gasket know-how for the development and production of your gaskets. Excellent availability and shortest delivery times: we have an experienced sales partner in the U.S. gasket industry providing an excellent service. Our distributor Target Industrial Products in the United States stocks ample supplies of our products for fast, on-demand delivery. Assistance and advice are never more than a phone call or an e-mail away.

Industrial Sealing Division
Product Portfolio

More detailed information can be found in our datasheets at **Reinz-Industrial.com/datasheet**





Contents

High-Performance Compressed Sheet

Universally applicable and extremely durable! We count on high performance fibers and high quality elastomers as binders: the product group High-Performance Compressed Sheet.

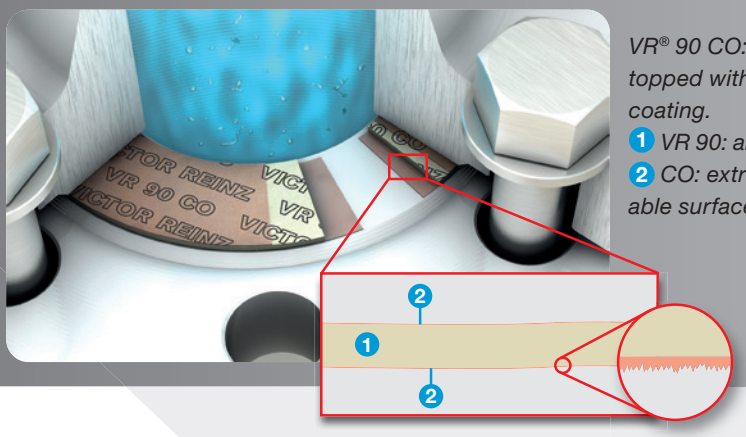
- **VR® 100**
- **VR® 90**
- **VR® 85**
- **VR® 80**
- **VR 100**

VR 100 is a compressed sheet material made from carbon fibers and other high-temperature-resistant substances. Due to its resistance to temperatures up to 520 °F (temporarily even up to a short-term peak of 825 °F) in combination with high chemical resistance, it is used especially by the oil processing industry. Another special feature of VR 100 is its excellent capability to seal alkaline solutions, e.g. brine in the pulp and paper industry.

VR 90
VR 90 is the most successful Victor Reinz gasket material of all time. The aramid fiber based classic is physiologically harmless and comes with numerous approvals (among others: TA Luft/German Clean air Act). Universally usable, this gasket material is the perfect sealing solution for a large number of fluids and withstands high temperatures and operating pressures.

VR 90 – combines a variety of excellent properties such as ultimate tensile strength, excellent gas-tightness, ultimate chemical resistance, and superior creep resistance even under elevated temperatures.

Leading companies in the Heating, Ventilation, Air Conditioning and Refrigeration Industry (HVAC/R Industry) in the US have been trusting the VR 90 material and other Victor Reinz products for decades – used, for example, in refrigeration compressors, evaporators, condensers, chillers, valves, etc.



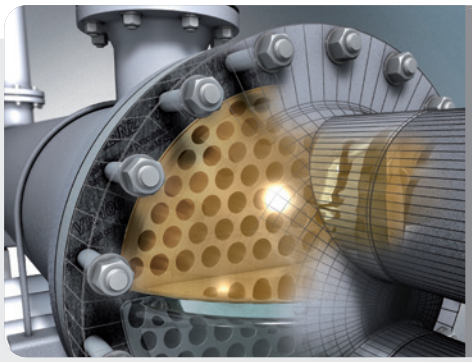
VR® 90 CO: consisting of VR 90 topped with an innovating surface coating.
1 *VR 90: aramid fiber based material*
2 *CO: extremely thin, highly adaptable surface coating*

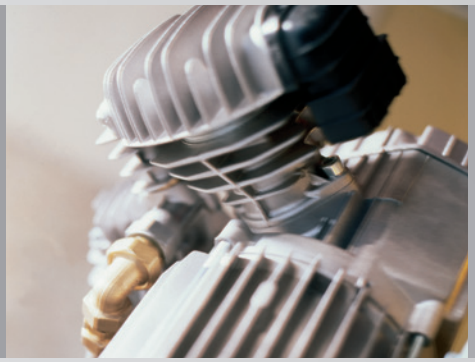
The areas of application include the chemical industry, the oil and gas industry, the HVAC/R industry on to engine construction and mechanical engineering, and many more.

VR 90 CO
In cases where VR 90 is the ideal material but surface irregularities or imperfections might lead to surface leakage, VR 90 CO is the answer. It features a special coating, called “CO coating”, that compensates for small irregularities to prevent leakage.

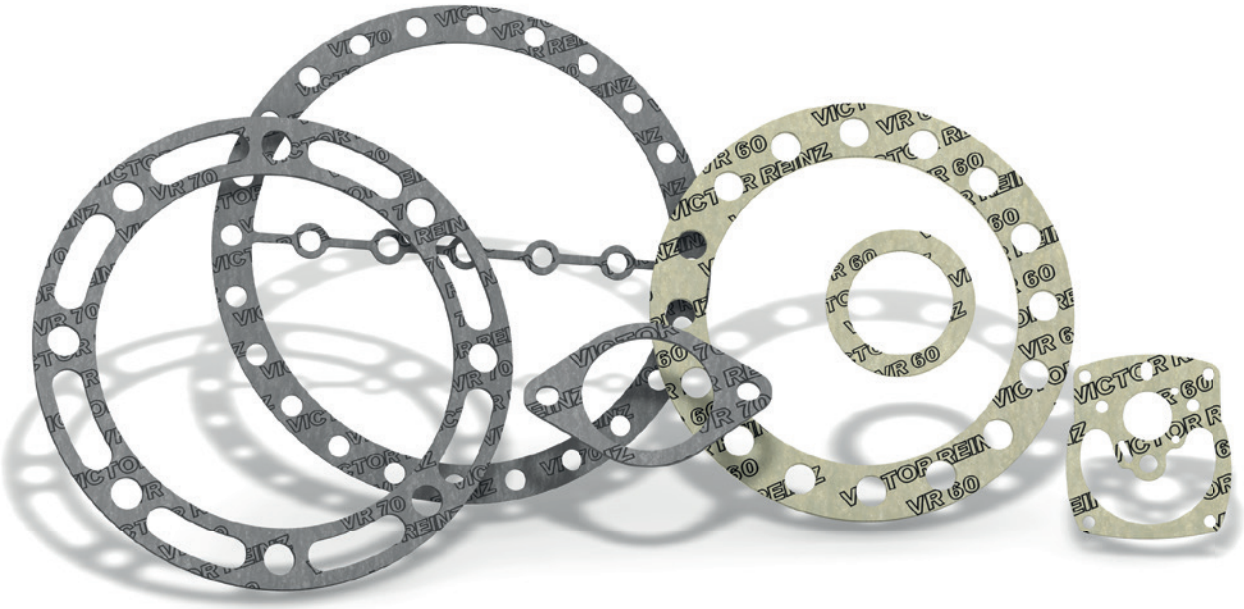
VR 85
VR 85 is suitable for sealing joints under high mechanical-thermal stresses where stability and tensile strength are required. Because of its good adaptability it seals oils, water, and gases very well. It is widely used, for example, in combustion engines and marine applications.

VR 80
VR 80 features excellent gas tightness coupled with high tensile strength and excellent creep resistance. It is therefore especially used for sealing tasks in the gas industry and for compressors, but also to seal fluids in pumps, transmissions and small engines, to name just a few.





General Service Compressed Sheet



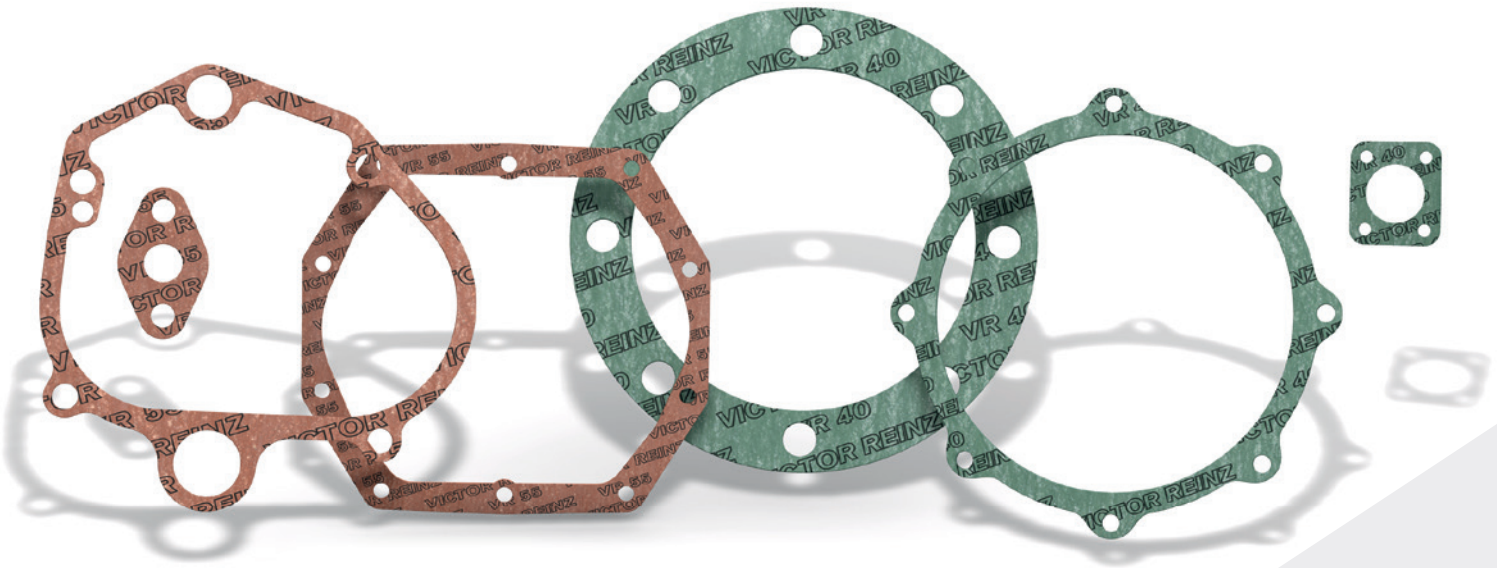
Sound quality at a good price for a wide range of applications! An important part of our productline: the **General Service Compressed Sheet** product group.

- **VR 70**
- **VR 60**

VR 70
VR 70 is a sturdy gasket material and provides an excellent value for money. Used in demanding applications such as, e.g. in HVAC/R, oil & gas, pumps, compressors, and transformers.

VR 60
Because of its great adaptability and physiological safety, VR 60 covers a wide range of applications from general mechanical engineering through sanitary installations on to potable water applications.

Soft Range Compressed Sheet



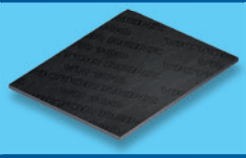
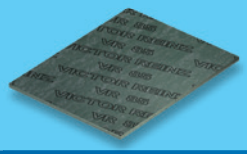
Low bolt load? We have just the right gasket material: the **Soft Range Compressed Sheet** product group.

- **VR® 55**
- **VR® 40**

VR 55
VR 55 shows excellent sealability and adaptability already at low bolt load. Its good tensile strength makes it ideal for use in easily deformable construction components that are subjected to high mechanical stress. Accordingly, it is used in a broad range of applications, e.g. in housings, covers, gear boxes, HVAC/R, engines, marine applications and hydraulics, to name just a few.

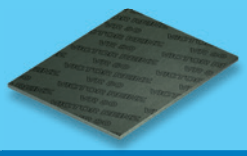
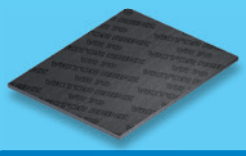
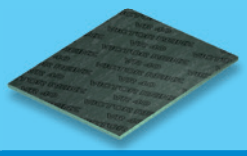
VR 40
VR 40 shows excellent adaptability and sealability already at low bolt load. It is our well-priced material for light-weight applications, e.g. in HVAC/R, gear boxes and motors, housings, covers, etc.

As a standard, all of our materials feature anti-bake properties, facilitating removal of the gasket. Additionally we offer a number of special-purpose material coatings. Please contact us for further details.

Material	High-Performance Compressed Sheet		
	VR 100	VR 90	VR 85
			
Features	¬ Highest Temperature Resistance ¬ Superior Creep Resistance ¬ Carbon and Inorganic Fibers ¬ Nitrile Binder	¬ Ultimate Chemical and Mechanical Resistance ¬ Superior Creep Resistance combined with Ultimate Tensile Strength ¬ Aramid and Inorganic Fibers ¬ Nitrile Binder	¬ High Tensile Strength Combined with Good Adaptability ¬ Excellent Creep Resistance combined with Very High Tensile Strength ¬ Aramid and Inorganic Fibers ¬ Nitrile Binder
Typical Applications	Oil Processing Industry, Pulp and Paper	Chemical Industry, HVAC/R, Water, Oil & Gas, Engines, Marine Applications, Mechanical Engineering	Combustion Engines, Marine Applications

Technical data (typical values refer to 1/16" thick material unless otherwise specified)	Standard			
Tensile strength, transverse	ASTM F 152	> 2180 psi / > 15 MPa	> 2610 psi / > 18 MPa	> 2180 psi / > 15 MPa
Creep relaxation (1/32" unless otherwise specified)	ASTM F 38 B	15 %	15 %	17 %
Sealability (1/32"), Nitrogen	ASTM F 37 B	0.25 ml / h	0.12 ml / h	0.15 ml / h
Gas permeability	DIN 3535 / 6	~ 0.1 mg / (s*m)	~ 0.02 mg / (s*m)	< 0.1 mg / (s*m)
Compressibility	ASTM F 36 J	6 – 10 %	5 – 8 %	7 – 12 %
Recovery	ASTM F 36 J	> 60 %	> 55 %	> 50 %
VR-Hot compression test (@7250 psi):				
Thickness decrease at 68 °F (20 °C)		9 %	6 %	13 %
Thickness decrease additional, at maximum continuous application temperature		11 % (520 °F / 270 °C)	8 % (480 °F / 250 °C)	7 % (480 °F / 250 °C)
Increase in thickness after immersion in:	ASTM F 146			
IRM 903 Oil, 5 h, 300 °F		0 – 10 %	0 – 7 %	0 – 8 %
ASTM Fuel B, 5 h, 73 °F		0 – 10 %	0 – 10 %	0 – 7 %
Water/antifreeze 1:1, 5 h, 212 °F		0 – 7 %	0 – 10 %	0 – 5 %
Increase in weight after immersion in:	ASTM F 146			
IRM 903 Oil, 5 h, 300 °F		10 % maximum	7 % maximum	12 % maximum
ASTM Fuel B, 5 h, 73 °F		10 % maximum	10 % maximum	10 % maximum
Water/antifreeze 1:1, 5 h, 212 °F		7 % maximum	10 % maximum	15 % maximum
Density		109 – 122 lb/ft^3 / 1.75 – 1.95 g/cm^3	112 – 125 lb/ft^3 / 1.8 – 2 g/cm^3	100 – 112 lb/ft^3 / 1.6 – 1.8 g/cm^3
ASTM line call-out	ASTM F 104, respectively F 868 for metal reinforced materials	F711110-A9B2E12M6	F711110-A9B2E12K7M6	F712120-A9B3E12M6
Operating temperature, max. [1]	continuous	520 °F / 270 °C	480 °F / 250 °C	480 °F / 250 °C
	temporary (peak)	825 °F / 440 °C	750 °F / 400 °C	750 °F / 400 °C
Operating pressure [1]	max.	1880 psi / 130 bar	2180 psi / 150 bar	2180 psi / 150 bar
Standard formats [2]				
Sheet size respectively coil width		1.5 x 1.5 m (approx. 60 x 60") to 1.5 x 4.5 m	1.5 x 1.5 m (approx. 60 x 60") to 1.5 x 4.5 m	1.5 x 1.5m (approx. 60 x 60") to 1.5 x 4.5 m
Thickness		1/64" to 1/8"	1/64" to 7/32"	1/64" to 1/8"

[1] Maximum operating pressure and maximum operating temperature must not occur simultaneously.
[2] Special sheet sizes and material thicknesses on request.
Technical data shown in above table are valid on print date. Please check web site **www.targetindustrial.com** for most current version.

	General Service Compressed Sheet		Soft Range Compressed Sheet	
VR 80	**VR 70**	**VR 60**	**VR 55**	**VR 40**
				
¬ High-Performance Sheet with Excellent Gas Tightness ¬ Excellent Creep Resistance combined with High Tensile Strength ¬ Aramid and Inorganic Fibers ¬ Nitrile Binder	¬ Multi-Purpose General Service Sheet ¬ Very Good Creep Resistance combined with Good Tensile Strength ¬ Aramid and Inorganic Fibers ¬ Nitrile Binder	¬ Good General Service Sheet ¬ Good Creep Resistance ¬ Aramid and Inorganic Fibers ¬ Nitrile Binder	¬ Excellent Sealability and Adaptability already at Low Bolt Load ¬ Good Tensile Strength combined with Good Creep Resistance ¬ Aramid and Inorganic Fibers ¬ Nitrile Binder	¬ Excellent Adaptability and Sealability already at Low Bolt Load ¬ Good Creep Resistance ¬ Aramid and Inorganic Fibers ¬ Nitrile Binder
Gas Industry, Compressors, Pumps, Transmissions, Small Engines	HVAC/R, Oil & Gas, Pumps, Compressors, Transformers	Potable Water, Sanitary Installations, Pumps	Housings, Covers, Gear Boxes, HVAC/R, Engines, Marine Applications, Hydraulics	HVAC/R, Gear Boxes and Motors, Housings, Covers
> 1740 psi / > 12 MPa	> 1160 psi / > 8 MPa	> 1015 psi / > 7 MPa	> 1160 psi / > 8 MPa	> 1015 psi / > 7 MPa
15 %	16 %	21 %	19 %	22 %
0.22 ml / h	0.14 ml / h	0.11 ml / h	0.02 ml / h	0.05 ml / h
~ 0.05 mg / (s*m)	< 0.1 mg / (s*m)	~ 0.05 mg / (s*m)	< 0.01 mg / (s*m)	< 0.01 mg / (s*m)
7 – 15 %	7 – 15 %	9 – 18 %	14 – 23 %	15 – 25 %
> 50 %	> 50 %	> 50 %	> 50 %	> 60 %
11 % 8 % (480 °F / 250 °C)	10 % 17 % (480 °F / 250 °C)	12 % 22 % (430 °F / 220 °C)	17 % 28 % (390 °F / 200 °C)	15 % 26 % (390 °F / 200 °C)
0 – 10 % 0 – 10 % 0 – 5 %	0 – 10 % 0 – 10 % 0 – 5 %	10 – 25 % 10 – 25 % 0 – 10 %	0 – 10 % 0 – 15 % 0 – 5 %	0 – 10 % 0 – 15 % 0 – 5 %
10 % maximum 10 % maximum 10 % maximum	15 % maximum 10 % maximum 10 % maximum	20 % maximum 20 % maximum 10 % maximum	20 % maximum 20 % maximum 15 % maximum	20 % maximum 15 % maximum 15 % maximum
109 – 122 lb/ft³ / 1.75 – 1.95 g/cm³	119 – 131 lb/ft³ / 1.9 – 2.1 g/cm³	109 – 122 lb/ft³ / 1.75 – 1.95 g/cm³	87 – 106 lb/ft³ / 1.4 – 1.7 g/cm³	94 – 106 lb/ft³ / 1.5 – 1.7 g/cm³
F712110-A9B2E12M5	F712110-A9B3E12M4	F712330-A9B4E35M4	F714130-A9B3E33M4	F714130-A9B4E23M4
480 °F / 250 °C 750 °F / 400 °C	480 °F / 250 °C 750 °F / 400 °C	430 °F / 220 °C 570 °F / 300 °C	480 °F / 250 °C 660 °F / 350 °C	390 °F / 200 °C 570 °F / 300 °C
1450 psi / 100 bar	1450 psi / 100 bar	870 psi / 60 bar	1160 psi / 80 bar	725 psi / 50 bar
1.5 x 1.5 m (approx. 60 x 60") to 1.5 x 4.5 m 1/64" to 1/8"	1.5 x 1.5 m (approx. 60 x 60") to 1.5 x 4.5m 1/64" to 1/8"	1.5 x 1.5 m (approx. 60 x 60") to 1.5 x 4.5 m 1/64" to 1/8"	1.5 x 1.5 m (approx. 60 x 60") to 1.5 x 4.5 m 1/64" to 1/8"	1.5 x 1.5 m (approx. 60 x 60") to 1.5 x 4.5 m 1/64" to 1/8"

High-Performance Metal Reinforced Gaskets

High mechanical and thermal load? Applications with vibrations? No headache for us: the **High-Performance Metal Reinforced Gaskets** product group.

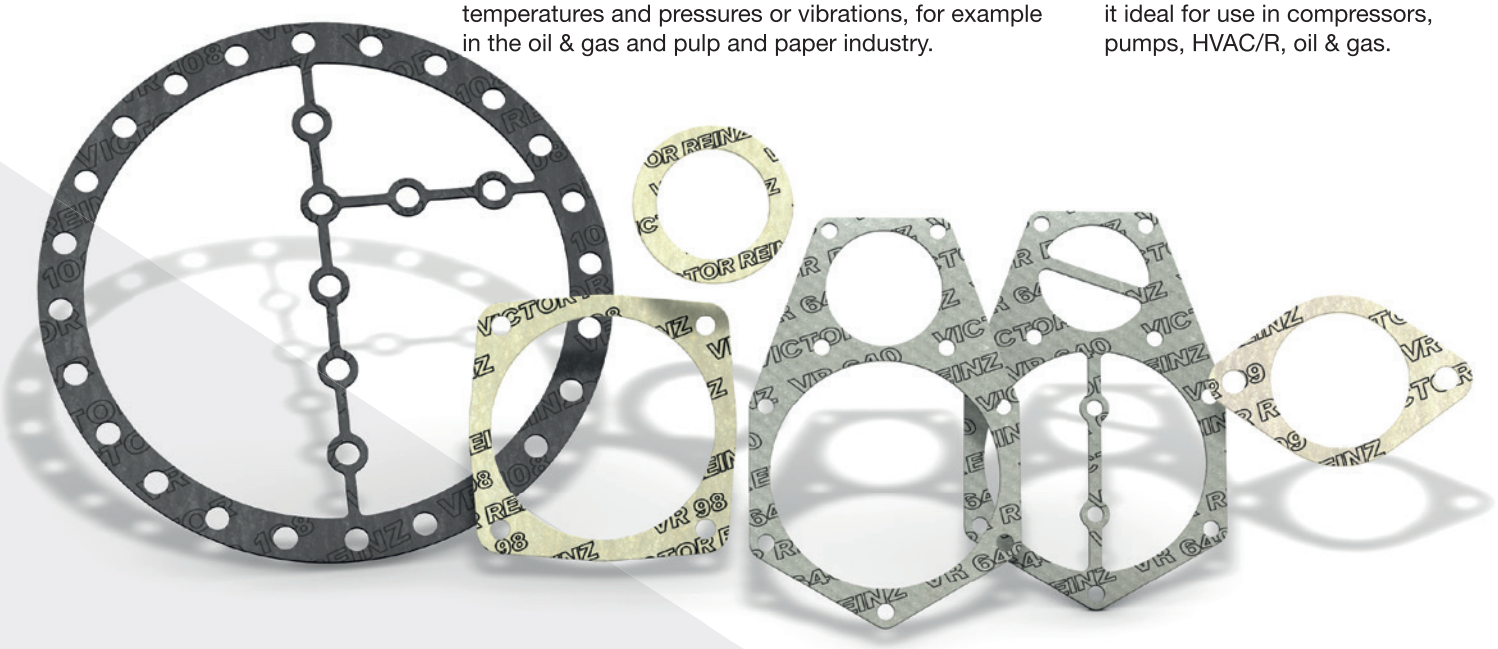
- **VR® 640**
- **VR® 108**
- **VR® 99**
- **VR® 98**

VR 640
VR 640 is a metal reinforced fiber based gasket material featuring a galvanized tanged steel core. It exhibits very high mechanical strength together with high pressure and superior temperature resistance, yet it still conforms well to sealing surfaces. The material is resistant to oils, fuels, and mixtures of water and antifreeze or corrosion inhibitors. Areas of application: e.g. intercoolers, compressors, engines, marine applications, HVAC/R.

VR 108
VR 108 is the metal reinforced variant of our carbon fiber material VR 100, wired with a mesh of galvanized carbon steel. It is ideal for applications with fluctuating temperatures and pressures or vibrations, for example in the oil & gas and pulp and paper industry.

VR 99
VR 99 is our VR 90, reinforced with an expanded stainless steel. The strong metal reinforcement ensures a high degree of blowout safety and mechanical strength. Areas of application: e.g. chemical industry, HVAC/R, water, oil & gas.

VR 98
VR 98 is the wire mesh reinforced variant of VR 90. The reinforcement consists of a galvanized carbon steel mesh. Its sturdiness makes it ideal for use in compressors, pumps, HVAC/R, oil & gas.

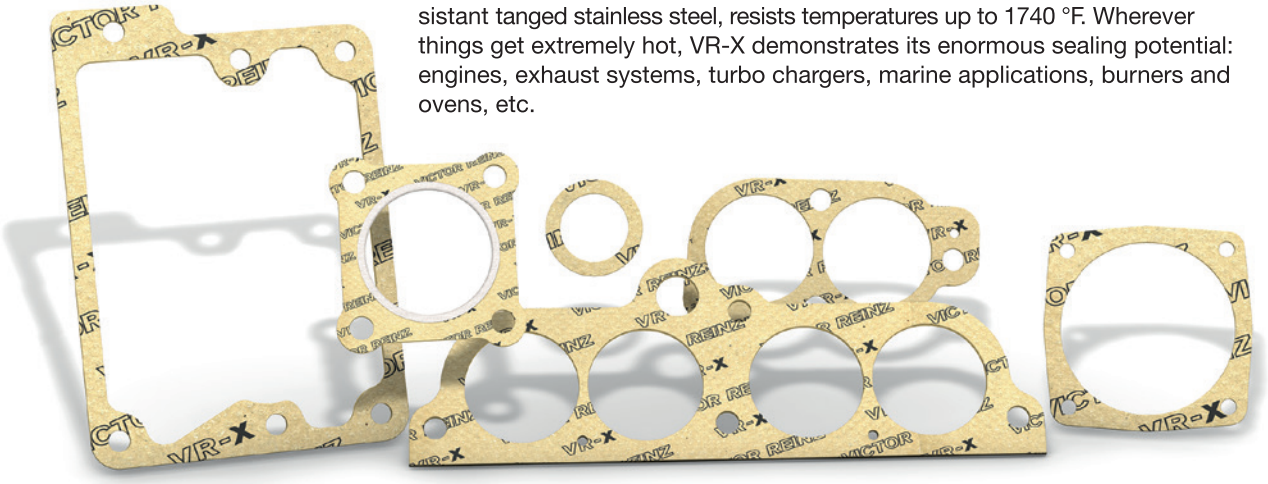


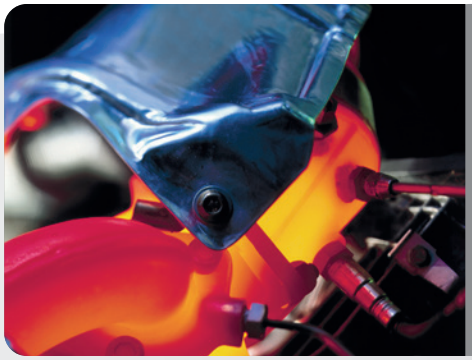
Controlled Swell Gaskets

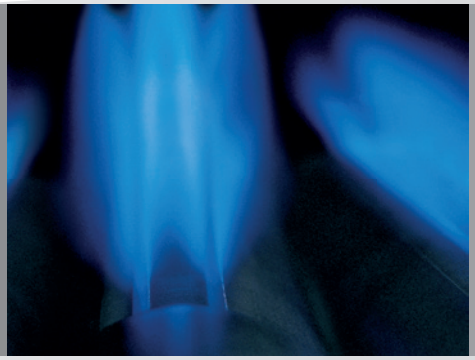
VR® 30 CS
VR 30 CS is a high-performance controlled swell material with high tensile strength. The dimensionally stable gasket material swells in oil in a controlled manner. Because of its specific properties the material is especially suitable for sealing oil pans, valve covers and transmissions.

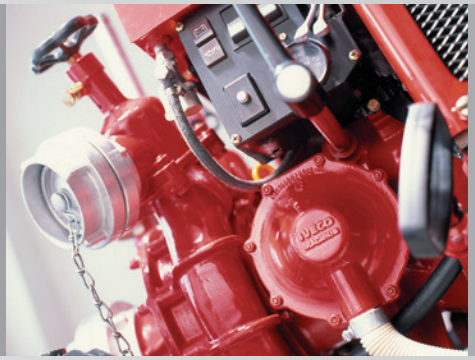
High-Temperature Metal Reinforced Mica Gaskets.

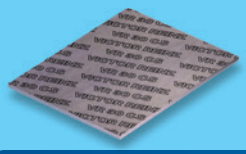
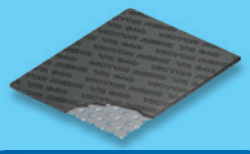
VR®-X
VR-X is the most heat-resistant material among the Victor Reinz gasket materials. The premium grade mica material, reinforced with a special heat-resistant tanged stainless steel, resists temperatures up to 1740 °F. Wherever things get extremely hot, VR-X demonstrates its enormous sealing potential: engines, exhaust systems, turbo chargers, marine applications, burners and ovens, etc.







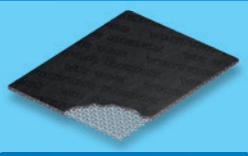


Material	Controlled Swell Gaskets	High-Performance Metal Reinforced Gaskets
	VR 30 CS	VR 640
		
Features	¬ High-Performance Controlled Swell Material ¬ Very Good Creep Resistance combined with High Tensile Strength ¬ Aramid and Inorganic Fibers ¬ Special Controlled Swell Binder	¬ Metal Reinforced with Galvanized Tanged Steel Core ¬ Ultimate Creep Resistance ¬ Superior Temperature Resistance ¬ Inorganic Fibers ¬ Nitrile Binder
Typical Applications	Oil Pans, Valve Covers, Transmissions	Intercoolers, Compressors, Engines, Marine Applications, HVAC/R

Technical data (typical values refer to 1/16" thick material unless otherwise specified)	Standard		nominal thickness 1.3 mm unless otherwise specified
Tensile strength, transverse	ASTM F 152	> 2030 psi / > 14 MPa	> 7250 psi / > 50 MPa
Creep relaxation (1/32" unless otherwise specified)	ASTM F 38 B	21 %	14 % [valid for t=1 mm]
Sealability (1/32"), Nitrogen	ASTM F 37 B	0.40 ml / h	-
Gas permeability	DIN 3535 / 6	< 0.1 mg / (s*m)	-
Compressibility	ASTM F 36 J	8 – 15 %	7 – 13 %
Recovery	ASTM F 36 J	> 55 %	> 55 %
VR-Hot compression test (@7250 psi):			
Thickness decrease at 68 °F (20 °C)		11 %	9 %
Thickness decrease additional, at maximum continuous application temperature		10 % (390 °F / 200 °C)	4 % (570 °F / 300 °C)
Increase in thickness after immersion in:	ASTM F 146		
IRM 903 Oil, 5 h, 300 °F		10 – 30 %	0 – 10 %
ASTM Fuel B, 5 h, 73 °F		10 – 30 %	-
Water/antifreeze 1:1, 5 h, 212 °F		-	0 – 7 %
Increase in weight after immersion in:	ASTM F 146		
IRM 903 Oil, 5 h, 300 °F		30 % maximum	-
ASTM Fuel B, 5 h, 73 °F		20 % maximum	-
Water/antifreeze 1:1, 5 h, 212 °F		-	-
Density		97–109 lb / ft^3 / 1.55 – 1.75 g / cm^3	-
ASTM line call-out	ASTM F 104, respectively F 868 for metal reinforced materials	F712440-A9B4E35M6	0FMF1; F = F702100-B2E00M8
Operating temperature, max.[1]	continuous	390 °F / 200 °C	570 °F / 300 °C
	temporary (peak)	750 °F / 400 °C	750 °F / 400 °C
Operating pressure[1]	max.	1740 psi / 120 bar	-
Standard formats[2]			
Sheet size respectively coil width		1.5 x 1.5 m (approx. 60 x 60") to 1.5 x 4.5 m	coil width max. 0.5 m (approx. 20")
Thickness		1/64" to 1/8"	0.75 to 1.8 mm

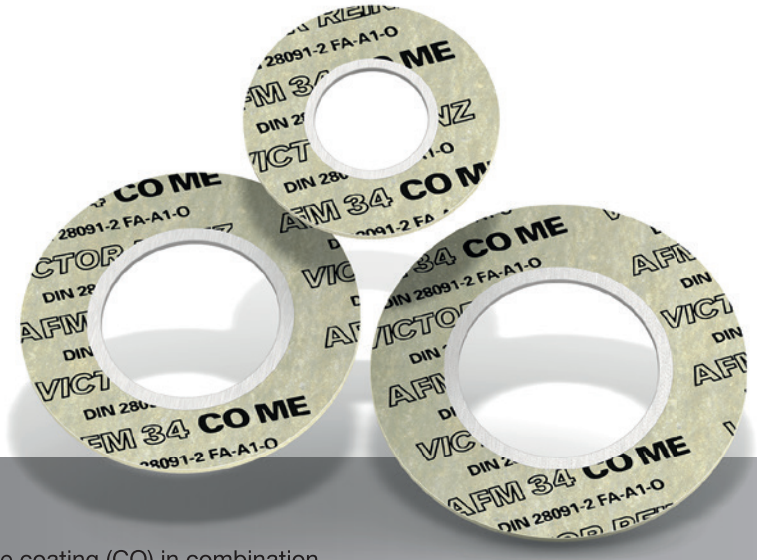
[1] Maximum operating pressure and maximum operating temperature must not occur simultaneously.
[2] Special sheet sizes and material thicknesses on request.
Technical data shown in above table are valid on print date. Please check web site **www.targetindustrial.com** for most current version.

High-Temperature Metal Reinforced Mica Gaskets

	VR 108	VR 99	VR 98	VR-X
				
	¬ Metal Reinforced with Galvanized Steel Mesh ¬ Superior Creep Resistance ¬ Very High Temperature Resistance ¬ Carbon and Inorganic Fibers ¬ Nitrile Binder	¬ Metal Reinforced with Expanded Stainless Steel Core ¬ Ultimate Chemical Resistance ¬ Superior Creep Resistance ¬ Highest Pressure Resistance ¬ Aramid and Inorganic Fibers ¬ Nitrile Binder	¬ Metal Reinforced with Galvanized Steel Mesh ¬ Superior Creep Resistance ¬ High Temperature Resistance ¬ Aramid and Inorganic Fibers ¬ Nitrile Binder	¬ Metal Reinforced with Special Heat-Resistant Tanged Steel Core ¬ Excellent Creep Resistance ¬ Ultimate Temperature Resistance up to 1740 °F (950 °C)“ ¬ Mica Material
	Oil Processing Industry, Pulp and Paper	Chemical Industry, HVAC/R, Water, Oil & Gas	Compressors, Pumps, HVAC/R, Oil & Gas	Engines, Exhaust Systems, Turbo Chargers, Marine Applications, Burners and Ovens
	> 3335 psi / > 23 MPa	> 7540 psi / > 52 MPa	> 2900 psi / > 20 MPa	> 7250 psi / > 50 MPa
	18 %	22 % [valid for t=1 mm]	23 %	26 % [valid for t=1.2 mm]
	-	-	-	-
	~ 0.25 mg / (s*m)	~ 0.05 mg / (s*m)	~ 0.25 mg / (s*m)	-
	6 – 9 %	~ 5 %	> 5 %	5 – 15 %
	> 50 %	~ 60 %	> 60 %	> 40 %
	9 % 8 % (520 °F / 270 °C)	6 % 5 % (480 °F / 250 °C)	7 % 7 % (480 °F / 250 °C)	18 % 11 % (570 °F / 300 °C)
	0 – 10 % 0 – 10 % 0 – 7 %	0 – 10 % 0 – 10 % 0 – 5 %	0 – 10 % 0 – 10 % 0 – 5 %	0 – 5 % 0 – 5 % 5 – 20 %
	10 % maximum 10 % maximum 7 % maximum	10 % maximum 10 % maximum 5 % maximum	10 % maximum 10 % maximum 5 % maximum	15 % maximum 10 % maximum 20 % maximum
	122 –134 lb/ft³ / 1.95 – 2.15 g/cm³	~ 153 lb/ft³ / ~ 2.45 g/cm³	125 – 137 lb/ft³ / 2 – 2.2 g/cm³	-
	0FMF9; F = F711110-B3E12M7	0FMF9; F = F711110-B4E12M8	0FMF9; F = F711110-B4E12M6	0FMF1; F = F702120-B5E11M8
	520 °F / 270 °C 825 °F / 440 °C	500 °F / 260 °C 750 °F / 400 °C	480 °F / 250 °C 750 °F / 400 °C	1740 °F / 950 °C -
	2320 psi / 160 bar	3625 psi / 250 bar	2465 psi / 170 bar	-
	1.5 x 1.5 m (approx. 60 x 60") 1/32" to 1/8"	1.25 x 1.5 m (approx. 50 x 60") 1.0, 1.5 and 2.0 mm	1.5 x 1.5 m (approx. 60 x 60") 1/32" to 1/8"	coil width max. 0.5 m (approx. 20") 1.2 and 1.6 mm

Special Gasket Solutions

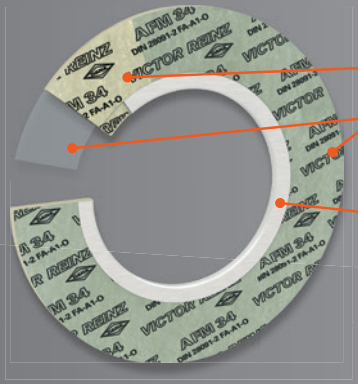
Eyeleted Gaskets



Special requirements under extremely difficult conditions? Our answer: the **Special Gasket Solutions** product group.

- **Eyeleted Gaskets**
- **Graphite Materials**
- **ePTFE-Material**
- **Rubber Coated Materials**

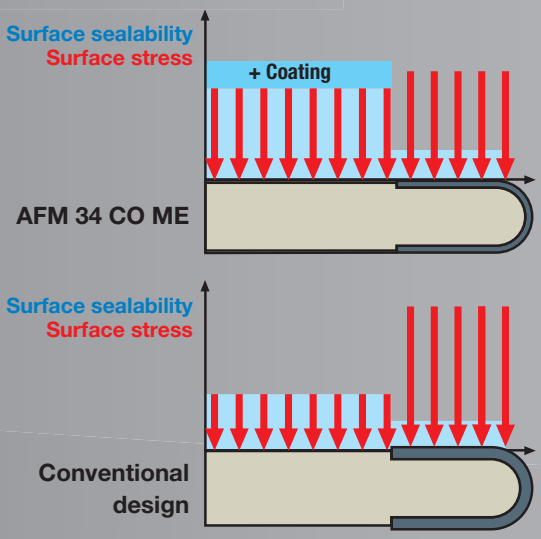
AFM 34 CO ME™.
Thanks to our innovative coating (CO) in combination with an easily adaptable metal eyelet (ME), AFM 34 CO ME gaskets provide ultimate sealing already at low bolt load. The flange gasket with stainless steel eyelet is used especially in the chemical, petro-chemical and natural gas industry.



AFM 34

Innovative coating (CO)
thin and highly adaptable to the flange surface

Metal eyelet (ME)



Surface stress distribution across the width of an eyeleted gasket, comparing an unfavourable conventional design with the innovative Victor Reinz AFM 34 CO ME gasket.

Graphite
Materials

ePTFE
Material

Rubber Coated
Materials

Chemotherm SP™ and Chemotherm SPE™.
Made of expanded graphite on a tanged steel core, Chemotherm SP is the special material for quick-changing thermal-mechanical operating conditions. Its excellent material properties give proof especially in the exhaust area or as a cylinder-head gasket.

Our Chemotherm SPE features a tanged stainless steel core. Thus, the SPE version expands the range of applications to sealing aggressive fluids, e.g. in piping construction and apparatus engineering.

REINZOFLON E™.
REINZOFLON E consists of pure expanded PTFE (ePTFE) – a material with excellent chemical resistance to aggressive fluids. Because of its special structure, ePTFE is mechanically very strong and stable as well as soft and very adaptable. REINZOFLON E is used wherever sealing against highly aggressive fluids, e.g. acids, is required.

MatriCS™ and MatriCS plus™.
MatriCS defines a new generation of rubber coated materials. It consists of a carbon steel core with fiber reinforced rubber coating; it is very compressible and features good recovery. MatriCS is the ideal solution for sealing joints that have to meet stringent mechanical and thermal requirements simultaneously.

MatriCS plus, compared to MatriCS, features stainless steel as metal core and a thicker fiber reinforced elastomer coating – for applications with high dynamics and/or where corrosion resistance is of importance.

1 FOR ALL

VictorReinz.com/jsi

REINZOSIL®

Quick-hardening silicone sealant

REINZOSIL®-t

The transparent solution from REINZOSIL

REINZOPLAST®

Unique permanently plastic wet sealing

RE-MOVE

Removes sealants in seconds

Sealants and Sealant Remover

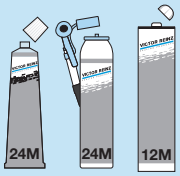
Simpler and Faster Sealing

Technical Datasheet
VictorReinz.com/jsi-datasheet

Safety Datasheet
VictorReinz.com/jsi-datasheet

REINZOSIL® is especially ideal for sealing surfaces in engines, transmission, axles, cylinder liners and plastic housings. It is very suitable for rough sealing surfaces and can be used universally for all motor and vehicle makes.

REINZOSIL is resistant to gasoline and diesel fuels, biodiesel, oils, greases, lubricants, water, seawater, sunlight and ozone. There is no outgassing, i.e. no gas escapes from REINZOSIL highly elastic universal sealing compound under the effects of temperature, so it does not influence electronic sensors.

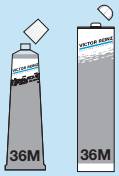


REINZOSIL®-t is the transparent version of REINZOSIL and is especially ideal for sealing surfaces with visible sealing joints.
REINZOSIL-t is resistant to gasoline and diesel fuels, biodiesel, oils, greases, lubricants, water, seawater, sunlight and ozone.

High-temperature resistance from -50 °C to +200 °C (short-term peak temperature).

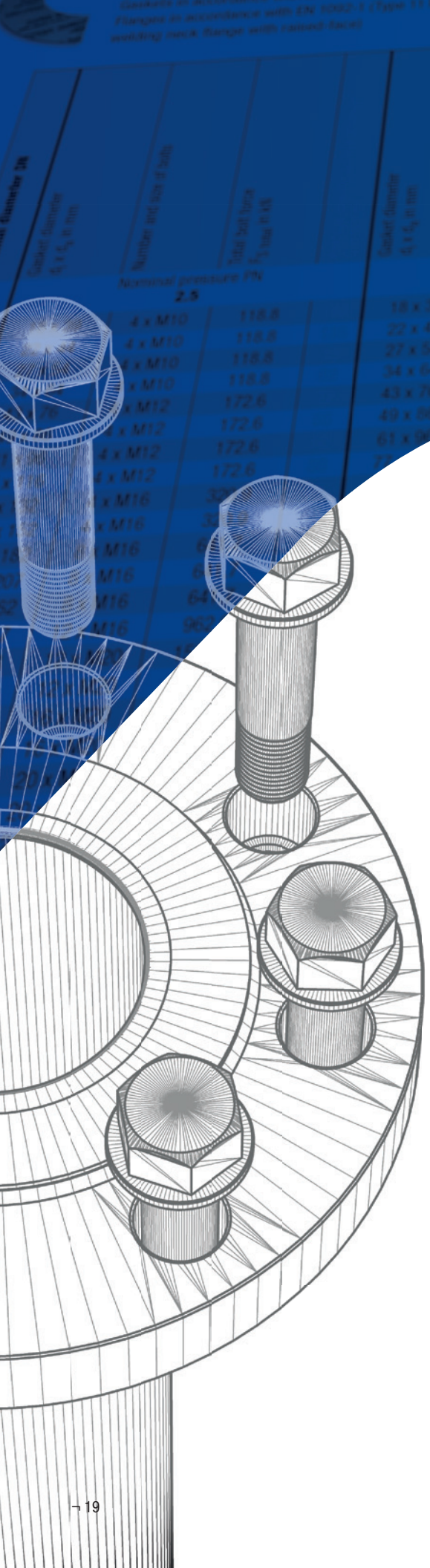
REINZOPLAST® is a permanently plastic, non-hardening PU sealing compound and is resistant to gasoline and diesel fuels, biodiesel, oils, greases, lubricants, water, seawater, sunlight and ozone.
High-temperature resistance from -50 °C to +300 °C (short-term peak temperature).

REINZOPLAST has excellent flow properties and does not crack when exposed to vibration.



Just follow these instructions:

- Cover any oil and coolant channels, as well as bearing surfaces.
- Shake can well before use.
- Spray onto the sealing surfaces until a closed film develops, and allow to react for approx. 10 minutes.
- Remove residues with a brush or spatula.
  (Attention: Do not damage the sealing surfaces!)
- Thoroughly clean the sealing surfaces with a dry, lint-free cloth.
- Turn the can upside down after use, and press button to clear the nozzle.



Practical Tips

Recommendations for Flat Gaskets
Correct mounting is the main requirement for the reliable functioning of a gasket. The bolts and the surfaces to be sealed must be selected according to the surface pressure (minimum required and maximum permissible) for the respective gasket.

Please note:

- Only new, undamaged, and dry gaskets should be used. Observe the storage conditions (see below).
- Clean the sealing surfaces carefully, without scratching them. Make sure that the sealing surfaces are dry.
- Position the gasket centrally; do not apply any supplementary media (grease, releasing agent, or sealing compound) to gaskets or sealing surfaces.
- Do not use corroded bolts, nuts or washers. The calculated surface pressures must coincide with the achieved pressures, therefore the bolts and nuts should be lubricated lightly.
- Mount the second sealing surface parallel to the first surface, and tighten the bolts by hand.
- In order to achieve an even distribution of surface pressure, the bolts must be torqued to the specified value «crosswise» and using at least 3 steps.
  Example:
  1. step: 20 % of the specified torque.
  2. step: 60 % of the specified torque.
  3.step: 100 % of the specified torque.
- All bolts must reach the same specified torque.
- Every gasket settles, especially after a longer period without loading; therefore, the bolts should be retorqued to 100 % before commissioning.
- Retorquing of fiber or PTFE-based gaskets that have already reached a higher operating temperature should only be done in the cold condition with great care and also in several steps, because there is a risk of destroying the gasket (especially with fiber gaskets that have hardened out).

Storage conditions for fibre based gaskets and material sheets (FA to DIN 28091-2). Maximum storage period two to three years under the following conditions:

- Temperature < + 20 °C
- Relative air humidity 30 % to 60 %
- No direct sunlight
- No artificial lighting with high UV content
- No ozone
- Stress-free storage

Any large deviation from the above will reduce the permissible storage period. In case of critical (e.g. toxic) gases, the storage period should not exceed one year. If necessary, the gaskets or gasket material sheets must be sealed in airtight and lightproof wrappings.

Fuji Films to Determing Surface Pressure
The Fuji «Prescale» film is ideally suited for the simple determination of the achieved surface pressure and its distribution over the sealing surface with flat gaskets. Depending on the sensitivity of the selected film, surface pressures between 0.2 N/mm^2 and 300 N/mm^2 are represented by different shades of red color. Fuji «Prescale» film can be ordered from:
REINZ-Dichtungs-GmbH
Give us a call under +49 731 7046-777.

Special Applications
Frequently, there are applications in which simple, punched gaskets are not sufficient.
Especially with molded seals or gaskets for covers and housings, only a low surface pressure is possible, so that even very soft gasket materials are not compressed sufficiently. By means of screen printing, an elastomer bead is deposited on both sides of the gasket. Consequently, the bolt force is concentrated at these points, whereby the gasket is compressed sufficiently to provide a reliable seal. The same effect is achieved with the elastomer-coated metal gaskets MatriCS / RETALL / PROGRESSION with embossment.

Flange gaskets with a metallic inner flange (preferably stainless steel) are used to increase blowout-safety or resistance to chemicals. AFM 34 CO ME, the new generation of blow-out proof flange gaskets features maximum leak-tightness even at low surface pressures, thus providing ideal conditions for complying with the new VDI 2290 leak tightness class based on Technical Guidelines on Air Quality Control (TA Luft).
We recommend to use the mica-based Xtreme plus (up to 950 °C) for high temperature exhaust gas applications.

NOTE
In the interests of making the correct choice of gaskets and sealing materials and their proper use, please refer to our Technical Data Sheets and Tables of «*gasket properties*» and «*maximum operating pressures*».
This information is obtainable online under:

Reinz-Industrial.com/datasheet.

We also recommend our brochures «*sealing surface pressure and bolt force*» PN resp. CLASS (39-00003-01 and 39-00004-01) which contain information on installation surface pressures and screw bolts.

Target Industrial Products, Inc.
Marketing & Distribution Center USA
970 Route 8
Glenshaw, PA 15116
Phone (412) 486-2627
Fax (412) 486-0914
sales@targetindustrial.com
www.targetindustrial.com

Dana Incorporated
REINZ-Dichtungs-GmbH
Reinzstraße 3 – 7
89233 Neu-Ulm
Germany
Reinz-Industrial.com

VICTOR REINZ™