WE BUILD FITTINGS

cmatic®
PNEUMATIC FITTINGS

1970 1980 1990 2000 2020

Cmatic was founded in the early 1970s as a contract supplier of precision metal parts. In a short time, the company expanded and evolved from a small business into a full-fledged industrial concern. Despite its increased size, Cmatic never loses sight of the changing demands of the market and focuses its attention on researching new materials and developing new products. The company's core business therefore finds its definitive dimension in the Design, Development and Production of Fittings for Industrial Automation. This has led Cmatic to offer an extensive, complete range of products, both in terms of the variety of materials used and of functionality in every pneumatic application, all without neglecting our willingness to develop custom solutions in collaboration with our clients.
Cmatic has been an ISO 9001 certified company since 1994. In 2018, thanks to the continuous development of its Management System, it also achieved ISO 14001 Environmental Management System certification and ISO45001 Occupational Health and Safety certification. The production plant in Giussano, located in the Brianza region of Italy's industrial heartland, covers more than 8500 square metres and produces 20 million fittings divided into more than 40 product lines and over 5000 configurations*.

* 2024 Data

Quality made of design, innovation and development. And, above all, of continuous improvement. In our lab, we carry out stringent product quality tests and constant R&D activities to offer the highest standard on the market to our customers.

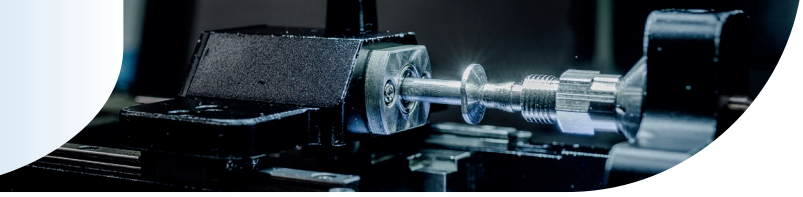
01
QUALITY TESTS

02
SEARCH FOR NEW APPLICATIONS

03
NEW FUNCTIONS DEVELOPMENT

04
FOCUS ON INDUSTRY INNOVATION

Certifications



Product Certifications and Compliance*

TÜV SÜD

NSF

MOCA

ROHS

REACH

Company Certifications

IQNET 9001:2015

IQNET 14001:2015 & 45001:2015

IQNET

Building trust together.

Certificate

SQS has issued an IQNET recognized certificate that the organization:

C. Matic S.p.A.
Via Matteotti, 32
IT-20833 Giussano Italy

has implemented and maintains a
Quality Management System

for the following scope:
Design and Manufacturing of fittings and accessories for pneumatic automation.
Procedures on how to carry out the weighing activities meant to determine the «Verified Gross Mass of the Container» (VGM), according to Method 2 as set forth by the amendments in Chapter VI, Rule 2, of SOLAS 74 Convention, as amended (IAF Scope 17, IAF Scope 31)

which fulfils the requirements of the following Standard:

ISO 9001:2015

Issued on: **2024-03-17**
Expires on: **2027-03-16**

Registration Number: **CH-11318**

Alex Stoichitoiu
President of IQNet

F. Müller
CEO SQS

This attestation is directly linked to the IQNET Member's original certificate and shall not be used as a stand-alone document.

IQNET Members*:
AENOR Spain **AFNOR Certification** France **APCER** Portugal **CCC** Cyprus **CISQ** Italy **CQC** China **COM** China **COS** Czech Republic **Cro Cert** Croatia **DQS Holding GmbH** Germany **EAGLE Certification Group** USA **FCAV** Brazil **FONDONORMA** Venezuela **ICONTEC** Colombia **ICS** Bosnia and Herzegovina **INTECO** Costa Rica **IRAM** Argentina **JQA** Japan **KFQ** Korea **LSQA** Uruguay **MIRTEC** Greece **MSZT** Hungary **Nemko AS** Norway **NQA** Ireland **NYCE** Mexico **PCBC** Poland **Quality Austria** Austria **SII** Israel **SIQ** Slovenia **SIRIM QAS International** Malaysia **SOS** Switzerland **SRAC** Romania **TSE** Türkiye **YUQS** Serbia

* The list of IQNET Members is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

SQS

Certificato

La SQS attesta che l'organizzazione di seguito indicata dispone di un sistema di gestione conforme ai requisiti della base normativa menzionata.

cmatic

C. Matic S.p.A.
Via Matteotti, 32
20833 Giussano (MB)
Italia

Campo di applicazione
Progettazione e Produzione di raccorderia ed accessori per l'automazione pneumatica.
Procedura per lo svolgimento delle attività di pesatura per la determinazione della "Massa Lorda Verificata del Contenitore" (VGM) secondo il Metodo 2 previsto dagli emendamenti al capitolo VI Regola 2 dalla convenzione SOLAS 74 come emendata (IAF Scope 17, IAF Scope 31)

Base normativa
ISO 9001:2015 — Sistema di gestione per la qualità

No. di reg. 11318
Pagina 1 di 1

Validità 17.03.2024 – 16.03.2027
Emissione 17.03.2024

A.Grisard, Presidente SQS

F. Müller, CEO SQS

Associazione Svizzera per Sistemi di Qualità e di Management (SQS)
Bernstrasse 103, 3052 Zollikofen, Svizzera

Swiss Made

Member of IQNET

Download the always up-to-date certificates here

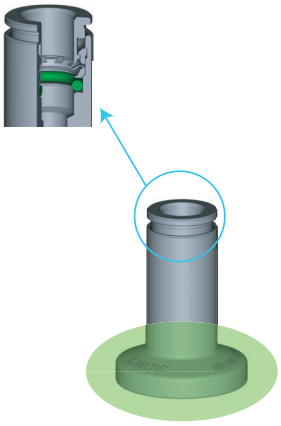
* Certifications related to specific product lines or individual units.

XT clamp solution

Clamp Solutions for Sanitary Applications

The Clamp connection style fitting is a perfect solution for all applications requiring the Cleaning in Place (C.I.P) sanitation procedure. The assembly and disassembly of a Clamp fitting is very easy and does not require the use of any tool.
The fitting is made of Stainless steel only and guarantees a secure, smooth, uniform connection between two surfaces.
Cmatic boasts a long experience in the production of Stainless Steel fittings and couplings suitable for harsh aggressive environments and today is proud to expand the product offer to a new range, the XT Clamp line for Pharma, Biotech, Cosmetics, Food & Beverage, Chemical applications and in general all those market segments, where a high degree of hygiene is requested.
The dimension of the XT Clamp is compliant with the ASME BPE norm.

Push-in Fitting



Type A: 25
Type B: 50,4

PX11 XT

PX15 XT

The Clamp surface finishing matches **SF1** Class

1 GENERAL WARNINGS:

1.1 Choosing a suitable product and checking its compatibility with the intended application is the sole responsibility of the system designer/user or whoever defines the specifications/technical features of the said system. Responsibility for the operation and safety of the system lies with the designer who has established compatibility with the product. It is the designer who is obliged to check for any changes in product specifications in order to prevent any possible malfunctions or failures in the system. To be sure to consult the latest state-of-the-art data, it is advisable to refer to the data in the catalogue published online at www.cmatic.com.
1.2 Avoid use in environments with corrosive gases, chemicals, salt water, water or steam. In the case of installation in "critical" environments or in contact with potentially aggressive liquids, please refer to the Chemical Compatibility Table on page 10 of this volume. This table contains a list of all the materials used in our fittings. To identify the specific items for each product line, the introductory page of each series should be consulted.
The information in the table is purely indicative and the actual behaviour of the materials must in any case be tested under the actual conditions of use, as factors such as temperature, pressure and concentrations of substances can lead to significant variations in compatibility assessments. The information contained in the Chemical Compatibility Table should not be regarded as a contractual obligation and any liability is expressly disclaimed. The Customer is not released from the obligation to check the suitability of the products and their suitability for the intended application.
C.matic reserves the right to update and modify the information in the Chemical Compatibility Table at any time and without prior notice.
1.3 Do not expose the product to direct sunlight for prolonged periods during its operation;
1.4 Do not use in places subject to strong vibrations or shocks;
1.5 Do not assemble the product in areas exposed to heat sources;
1.6 Do not use fluids other than those listed in the Catalogue specifications of each product series;
1.7 The pressure and temperature values given in the Catalogue for each product series must be strictly adhered to. If the products are used under pressure and/or temperature conditions outside the indicated range, this may lead to damage or malfunctions.
1.8 It is absolutely forbidden to disassemble the product or to perform modifications and/or reworkings on it. Any such actions, in addition to invalidating any product guarantee, may adversely affect operation and expose the system and users to possible risks.
1.9 The products in the Catalogue are potentially dangerous if used improperly. Assembly, commissioning, and maintenance of machines or equipment in which Cmatic fittings are installed must only be carried out by an experienced and trained operator. Do not service or attempt to remove the product until the system has been made safe.
1.10 If it is necessary to remove the product, ensure that the power supply to the system from any source (pneumatic, electric, etc.) has been cut off beforehand, and that the above safety measures have been implemented.

2 WARNINGS AND INSTRUCTIONS FOR THE CORRECT INSTALLATION OF THE PRODUCT:

2.1 Male threads

In case of a male threaded fitting assembly, please follow the instructions below:

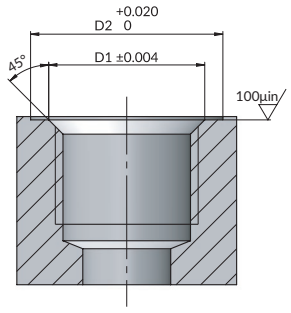
- screw at least the first few pitches of the thread by hand to secure it in the female housing.
- to tighten, use a wrench/tool consistent in size with the hexagonal part on the fitting. In the case of an internal hex , when using an allenkey pay attention to avoid contact with internal components that could be damaged;
- excessive tightening torque or gripping in an area other than the one indicated may result in damage to the product; therefore, the following tightening torques must be strictly adhered to, depending on the type of thread:

A) Tightening forces (Nm)

Filetto Thread	Norma Standard	M3x0,5	M5x0,8	M6x1	M7x1	M8x1	M10x1	M12x1,25	M12x1,5	10-32	1/8	1/4	3/8	1/2	3/4
Gas conica con PTFE Taper gas with PTFE	UNI EN 10226-1										2,5	3,5	6	18	
NPTF con PTFE NPTF with PTFE	ANSI/ASME B1.20.3										11	12	13	18	24
Gas cilindrica con O-Ring Parallel gas with O-ring	UNI EN ISO 228-1										1,2	1,5	2,5	3,5	
Easy thread	CMATIC										1,2	1,5	2,5	3,5	
Gas cilindrica in resina acetalica con O-Ring Parallel gas in acetal resin with O-ring	UNI EN ISO 228-1										1,2	1,5	2,5		
Gas cilindrica con rondella in plastica Parallel gas with plastic washer	UNI EN ISO 228-1										2	3	4	8	
UNF con O-Ring UNF with O-ring	ANSI/ASME B1.1									0,8					
Metrica con O-Ring Metric with O-ring	UNI EN ISO 965-1	0,5	0,5	0,8	0,8			1,5	1,5						
Metrica conica con PTFE Taper metric with PTFE	UNI 7707			2,5		2,5	2,5								

WARNING: Parallel threads with oring

Before assembly, make sure that the female part is properly machined to allow perfect sealing with the oring of the male thread. Below a diagram with the dimensional and roughness specifications required for the female part:



Thread	Ø D1	Ø D2
G 1/8 – EASY 1/8*	.406	.531
G 1/4 – EASY 1/4*	.539	.649
G 3/8 – EASY 3/8*	.677	.807
G 1/2 – EASY 1/2*	.850	1.004
G 3/4	1.079	1.279
10-32 UNF	.126	.236
M3x0,5	.126	.236
M5x0,8	.205	.335

Thread	Ø D1	Ø D2
M6x1	.256	.374
M7x1	.295	.374
M10x1	.453	.571
M12x1,25	.508	.610
M12x1,5	.508	.610
M14x1,5	.587	.689
M16x1,5	.665	.807
M22x1,5	.902	1.083

*The EASY thread is the universal thread designed by Cmatic according to its own construction standards.

2.2 Pre teflon-coated taper thread

In the case of pre-Teflon-coated taper thread, it should be noted that the thread may have the first few pitches uncoated without this affecting the sealing capability of the thread. The tightness of the pre-Teflon-coated thread is always determined by the manufacturing quality of the female thread; therefore, it is essential to ensure the conformity of the latter before assembling the male thread. The pre-Teflon-coated thread can be reused up to 5 times. After each assembly-disassembly, before re-using the product, check the condition of the coating to ensure its integrity. Please note that the maximum number of 5 possible reuses of the pre-Teflon-coated thread is closely linked to the actual quality of the female thread and to the strict adherence to the recommended tightening torques. Failure to observe these factors can significantly reduce the service life and number of reuses.
The system's designer/user is responsible to verify the compatibility of the PTFE coating with the system and its operating conditions.

2.3 Tubing assembly

Once the fitting is connected to a tubing, a certain degree of orientation may be needed after installation for this reason we recommend making the most suitable choice from the various types of fittings in the catalogue:

- ORIENTABLE fitting: allows the tubing to be oriented in the desired direction only until the fitting is tightened in place. Thereafter, it will no longer be possible to change the position of the tubing except by loosening the fitting and repositioning the tubing in the desired direction.
- SWIVEL fitting: The tubing always has the possibility to move a few degrees along its axis. Wide rotations are not recommended, especially if they are associated with high cyclicality, which could significantly reduce the service life of the fitting.
- ROTATING fitting: The tubing can rotate even at high rpm.

This classification is given in the description of each product in the catalogue, and it is essential to adhere to it in order to make a suitable choice for the intended use. No liability is accepted for damage or premature degradation due to fittings subjected to conditions of use that do not comply with the above provisions.

2.4 Loads, vibrations or shocks

To avoid possible damage to the system due to a broken fitting and/or disconnection of the hose, ensure that no loads are applied to the fittings and that they are not subject to vibration or shock. Also ensure that no tensile or torsional forces are exerted on the fitting and/or tubing.

2.5 Removal of foreign bodies

If the product has not been stored in its original sealed packaging, check before use that the fitting inside is clean and, if necessary, remove any traces of dirt that may have fallen inside of the fitting, by blowing air into it. Please note that in most cases, the inner O-rings are lubricated. Any element deposited on the surface of the O-ring is difficult to remove and could compromise the pneumatic seal of the fitting.

2.6 Specific warnings

Each section on the individual fitting series may contain specific warnings and instructions for use marked with a symbol ⚠

3 PRODUCT STORAGE:

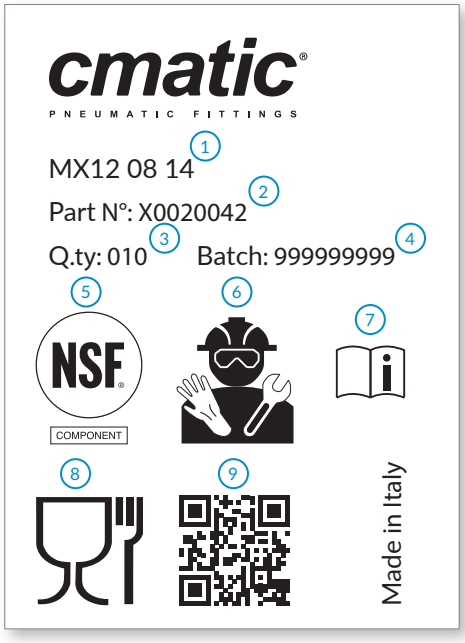
Products must be stored in their original packaging in order to keep all the information necessary for traceability over time.
In any case, the product must always be stored away from dust and moisture, and storage with direct exposure to sunlight must be avoided at all costs, as this would lead to rapid ageing, especially of plastic and rubber parts, affecting thereby their function and durability.
Please note that fittings made of brass and not subject to any galvanic surface protection treatment may change in colour over time. However, this should not be regarded as a product defect or lead to product replacement requests.

4 PRODUCT PACKAGING AND LABELLING:

See detailed information on page 8.

Product packaging and labelling

Before using the product, make sure that the packaging is intact and that the fittings contained in the bag have not been damaged during transport.
Each package has a label with different graphic and alphanumeric contents. The installer/user must have understood their meaning. For this purpose, a specimen packaging label is provided below in which the above-mentioned data and related meanings are shown. It is essential for the user to understand these contents for conscious and safe use of the product.



1 • Description of the item contained in the package.

2 • Unique alphanumeric part number of the item contained in the package.

3 • Number of fittings in the package.

4 • Production batch: a key element for the product traceability throughout the production chain. In the event of problems with the product, it is essential that the customer provides this information.

5 • NSF certification: this logo is only present if the item in the package is NSF certified.

6 • Experienced user: the presence of this logo is a reminder that the product is only for professional use by trained and experienced persons. It is emphasised that all necessary personal protective equipment must be worn during the installation to avoid in the event of accidents, health hazards.

7 • The presence of this logo recalls the need to consult the technical documentation, instructions and warnings relating to the product before proceeding with its installation and use.

8 • (EC)1935/2004: this logo, if present, identifies the article as compliant for food contact according to the relevant European regulation.

9 • QR code containing a series of useful information for traceability of the product and its movement in the warehouse. If scanned, it returns the following information string: part number|bags qty+batch number.

Conversion Tables and icons legend

Conversion tables

Pressure

	Pa	kPa	Mpa	bar	mbar	atm	p.s.i.	mmHg
1 Pa =	1	0,001	0,000001	0,00001	0,01	0,0000099	0.000145	0,00750
1 kPa =	1000	1	0,001	0,01	10	0,00987	0.14504	7,50062
1 Mpa =	1000000	1000	1	10	10000	9,86923	145.03774	7500,61505
1 bar =	100000	100	0,10000	1	1000	0,98692	14.50377	750,06151
1 mbar =	100	0,1	0,0001	0,001	1	0,0009869	0.01450	0,75006
1 atm =	101325	101,32500	0,10133	1,01325	1013,25000	1	14.69595	759,99982
1 p.s.i. =	6894,75729	6,89476	0,00689	0,06895	68,94760	0,06805	1	51,71492
1 mmHg =	133,32240	0,13332	0,00013	0,00133	1,33320	0,00132	0.01934	1

Length

	m	mm	in	ft
1 m =	1	1000	39.37008	3.28084
1 mm =	0,001	1	0.03937	0.00328
1 in =	0,02540	25,4	1	0,08333
1 ft =	0,30480	304,8	12	1

Weight

	N	Kg	g	lb	oz
1 N =	1	0,10197	101,97160	0.22481	3.59694
1 Kg =	9,80665	1	1000	2.20462	35.27396
1 g =	0,00981	0,001	1	0.00220	0.03527
1 lb =	4,44822	0,45359	453,59234	1	16
1 oz =	0,27801	0,02835	28,34952	0.06250	1

Temperature

°K =	°C + 273,15
°C =	(°F - 32) * 5/9
°F =	(9/5 * °C) + 32

Legend Icons

Working Temperature

Flow Rate

Silicone Free Product

In compliance with ISO4414 norm

Working Pressure

Nominal Diameter

Patent/Registered Design

Food Contact Product (EC 1935/2004)

Vacuum

Thread

In compliance with the EU REACH Regulation

NSF Certified Product

Opening Pressure

PTFE-coated thread

In compliance with the RoHS Directive

TÜV Certified Product

Chemical compatibility chart

The information given on this chart have to be used as a guide only and the actual materials' reaction has to be tested in the real working conditions considering that temperature, pressure and different substances concentration can affect the mentioned chemical compatibility. The information is not to be considered a contractual obligation and any liability whatsoever is expressly declined. The customer is not released from his obligation to investigate the products fitness and the suitability for the intended application. We reserve the right to change the information at any time and without prior notice.

LEGEND

Very Good	Good	Limited resistence	Not recommended	Information not available

Chemical compatibility chart

MEDIUM	FITTINGS									SEALS			HOSES					
	ALUMINIUM	CARBON STEEL	BRASS	INOX AISI316L	POM	PEI	PARA	PBT	PPSU	NBR	FPM/FKM	EPDM	PA 11-12	PA6	PA6.6	LDPE	PU Ether base	PTFE
Acetaldehyde	🟡	🔴	🔴	🟢	🟡	–	–	–	–	🔴	🔴	🟢	🟠	🟠	🟠	🟠	–	🟡
Acetic Acid (20%)	🟡	🔴	🔴	🟡	🟠	🟢	–	🟠	🟢	🟠	🟡	🟢	🟠	🔴	🔴	🟢	–	🟡
Acetic Acid (5%)	🟡	🔴	🔴	🟡	🟡	🟢	–	🟠	🟢	🟡	🟡	🟢	🟠	🔴	🔴	🟢	🔴	🟡
Acetic Acid (50%)	🔴	–	🔴	–	🔴	🟢	–	🟠	🟢	🔴	🟡	🟢	🔴	🔴	🔴	🟠	–	🟡
Acetone	🟡	🟢	🟡	🟢	🟡	🔴	🔴	🟡	🔴	🔴	🔴	🟢	🟠	🟡	🟡	🟠	–	🟡
Acetylene	🟢	🟢	🔴	🟢	🟡	–	–	🟡	–	🟢	🟢	🟢	🟢	🟢	🟢	–	–	🟡
Ammonia (10%)	🟢	🟢	🔴	🟢	🔴	🔴	–	–	–	🟡	🟡	🟢	🟡	🟡	🟡	🟠	–	–
Ammonia Anhydrous	🟢	🟢	🔴	🟢	🔴	–	–	–	–	🟡	🟡	🟢	🟡	🟡	🟡	🟢	–	🟡
Ammonia Aqueous	–	–	–	–	🟡	–	–	🟡	–	🟠	🔴	–	🟡	🟡	🟡	🟢	–	🟡
Ammonia Gas - Cold	–	–	–	–	–	–	–	–	–	🟡	🔴	🟢	–	–	–	–	–	–
Ammonia Gas - Hot	–	–	–	–	–	–	–	–	–	🔴	🔴	🟡	–	–	–	–	–	–
Ammonium Acetate	🟡	–	🟠	🟢	🟠	–	–	–	–	🟠	🟢	🟢	🟠	–	–	🟢	–	🟡
Ammonium Bicarbonate	🟡	–	–	–	–	–	–	–	–	🟠	🟠	🟢	–	–	–	–	–	–
Ammonium Carbonate	🟠	🟡	🔴	🟡	🟡	–	–	–	–	🔴	🟢	🟢	🟠	–	–	🟢	–	🟡
Ammonium Chloride	🔴	🔴	🔴	🟠	🔴	–	–	–	–	🟡	🟢	🟢	🟡	–	–	🟢	🟠	🟡
Ammonium Fluoride	🔴	🟢	–	🟢	–	–	–	–	–	🟢	🟡	🟢	–	–	–	🟢	–	🟡
Ammonium Hydroxide	🟠	🔴	🔴	🟢	🔴	🟢	–	–	–	🔴	🟡	🟢	🟡	–	–	🟢	–	🟡
Ammonium Nitrate	🟡	🟡	🔴	🟢	🟡	–	–	–	–	🟢	🟢	🟢	🟡	–	–	🟢	–	🟡
Ammonium Phosphate	🟡	–	🔴	🟢	🟡	–	–	–	–	🟡	🟡	🟡	🟠	–	–	🟢	–	🟡
Ammonium Sulfamate	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ammonium Sulfate	🔴	🔴	🔴	🟡	🔴	–	–	–	–	🟢	🟢	🟢	🟠	–	–	🟢	–	🟡
Ammonium Sulfide	🟡	–	–	–	–	–	–	–	–	🟡	🔴	🟢	🟠	–	–	🟢	–	🟡
Aniline	🟠	🟠	🔴	🟡	🟠	–	–	🟢	–	🔴	🟢	🟡	🟠	🟠	🟠	🔴	–	🟡
Animal Fats	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	–	–	–	–	–	–
Anti-Freeze (Alchohol Base)	🟢	🟢	🟢	🟢	🔴	–	–	–	–	–	–	🟢	–	–	–	–	–	–
Anti-Freeze (Glycol Base)	🟢	🟢	🟢	🟢	🟡	–	–	–	–	–	–	🟢	–	–	–	–	–	–
Aqua Regia	🔴	🔴	🔴	🔴	🔴	–	–	🔴	–	🔴	🟡	🟠	🔴	🔴	🔴	🔴	–	🟡
Argon	–	–	–	–	–	–	–	–	–	🟠	–	–	–	–	–	–	–	–
Aromatic Hydrocarbons	🟢	🟢	–	🟠	🟢	–	–	🟡	🔴	🔴	🟢	🔴	–	–	–	🔴	–	–
Aromatic Solvents (Benzene etc.)	🟢	–	–	–	–	–	–	–	–	🔴	🟢	🔴	–	–	–	–	–	–
Arsenic Acid	🔴	🔴	🔴	🟢	🔴	–	–	–	–	🟡	🟡	🟡	–	–	–	🟢	–	🟡
Arsenic Salts	–	–	–	–	–	–	–	–	–	–	🟢	–	–	–	–	–	–	–
Ascorbic Acid	🟢	–	–	🔴	–	–	–	–	–	🟡	–	–	–	–	–	–	–	–
Benzene	🟡	🟢	🟡	🟡	🟡	🔴	🟢	🟢	🔴	🔴	🟢	🟡	🟠	🟡	🟡	🔴	–	🟡
Boric Acid	🔴	🔴	🔴	🟡	🔴	–	–	🟢	–	🟢	🟢	🟢	🟠	🟠	🟠	🟢	–	🟡
Brake Fluid	🟢	🟢	🟢	🟢	🟡	–	🟢	–	🔴	🔴	–	🟢	–	🟡	🟡	🟠	🔴	–
Butadiene	🟢	🟢	🟢	🟢	🟢	–	–	🟢	–	🔴	🟡	🟠	🟠	🟠	🟠	–	–	🟡
Butane	🟢	🟢	🟡	🟢	🟡	–	–	🟢	–	🟢	🟢	🔴	🟡	🟡	🟡	–	–	🟡
Butanol (Butyl Alcohol)	🟡	–	🟡	🟡	🟡	–	–	🟢	🟢	🟠	🟢	🟡	🟠	🟠	🟠	🟠	–	–
Butylene	🟢	–	🟡	🟢	🟢	–	–	–	–	🟢	🟢	🔴	–	–	–	–	–	🟡
Calcium Bisulfate	–	🔴	🟡	🟢	–	–	–	–	–	–	–	🟢	–	–	–	–	–	🟡
Calcium Bisulfide	🟠	–	–	🟡	🔴	–	–	–	–	🟠	🟢	🟢	–	–	–	–	–	–
Calcium Bisulfite	🔴	–	🔴	🟢	🔴	–	–	–	–	🟡	🟢	🔴	🟠	–	–	🟢	–	–
Calcium Chlorate	🟡	–	–	–	🟢	–	–	–	–	🟠	🟡	🟡	–	–	–	🟢	–	–
Calcium Chloride (10%)	🔴	🟡	🟡	🟡	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	–	🟡
Calcium Hydroxide	🟠	🟢	🟡	🟡	🟡	🟡	–	🟢	–	🟡	🟡	🟡	🟠	–	–	🟢	–	🟡
Calcium Hypochlorite (10%)	🔴	🔴	🔴	🟡	🔴	–	–	🟠	–	🟠	🟢	🟡	🔴	–	–	🟢	–	🟡
Calcium Nitrate	🟡	🟡	🟠	🟡	🔴	–	–	–	–	🟢	🟢	🟢	🟠	–	–	🟢	–	–
Calcium Nitrite	–	–	–	🟢	🔴	–	–	–	–	–	–	–	–	–	–	–	–	–
Calcium Oxide	🟠	🟠	–	🟢	🟢	–	–	–	–	🟢	🟡	🟢	–	–	–	🟢	–	–
Calcium Silicate	🟢	–	–	–	–	–	–	–	–	🟢	🟢	🟢	–	–	–	–	–	–
Calcium Sulfate	🟠	🟢	–	🟡	🔴	–	–	–	–	🟢	🟢	🟢	🔴	–	–	🟢	–	–
Calcium Sulfide	🟢	–	–	🟡	🟡	–	–	–	–	🟢	🟢	🟢	–	–	–	–	–	–
Carbon Bisulfide	🟡	–	🔴	🟡	🟡	–	–	–	–	🔴	🟢	🔴	–	–	–	–	–	–
Carbon Dioxide	🟢	🟢	🟡	🟢	🟠	–	–	–	–	🟢	🟢	🟡	🟡	–	–	–	–	🟡
Carbon Dioxide (dry)	🟡	🔴	🟢	🟢	🟡	–	–	–	–	–	🟡	🟡	–	–	–	–	–	–
Carbon Dioxide (wet)	🟢	🔴	🔴	🟢	🟡	–	–	🟢	–	–	🟡	🟡	–	–	–	–	–	–
Carbon Monoxide	🟢	🟢	🟢	🟢	🟡	–	–	–	–	🟡	🟢	🟢	–	–	–	🟢	–	–
Carbon Tetrachloride	🔴	🔴	🟠	🟡	🟡	🟢	–	–	🟡	🟠	🟢	🔴	🔴	🟡	🟡	🔴	–	🟡
Carbonated Beverages	🟠	–	–	🟢	–	–	–	–	–	–	🟢	–	–	–	–	–	–	–
Carbonated Water	🟠	🔴	🔴	🟢	🟢	–	–	–	–	🟢	🟢	–	–	–	–	–	–	–
Carbonic Acid	🔴	🔴	🔴	🟡	🟡	–	–	–	–	🔴	🟢	🟡	🟠	–	–	🟢	–	🟡
Chloric Acid	🔴	🔴	🔴	🔴	🔴	–	–	–	–	🔴	🟡	🟡	🔴	–	–	🟢	–	–
Chlorinated Water	🔴	–	🔴	–	🔴	–	–	🟠	–	🔴	🟢	–	–	–	–	–	–	–
Chlorine (dry)	🔴	🔴	🟡	🟡	🔴	–	–	–	–	🟡	🟢	🔴	🔴	🔴	🔴	🔴	–	🟡
Chlorine (wet)	🔴	–	–	🔴	🔴	–	–	–	–	–	🟢	–	🔴	🔴	🔴	🔴	–	🟡

Chemical compatibility chart

MEDIUM	FITTINGS									SEALS			HOSES					
	ALUMINIUM	CARBON STEEL	BRASS	INOX AISI316L	POM	PEI	PARA	PBT	PPSU	NBR	FPM/FKM	EPDM	PA 11-12	PA 6	PA6.6	LDPE	PU Ether base	PTFE
Chlorine Dioxide	●	–	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Chlorine Gas	–	–	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	●
Chlorine Water	●	–	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	●
Chlorine, Anhydrous liquid	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	●
Chloroacetic Acid	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	●
Chlorobenzene	●	●	●	●	●	●	–	●	●	●	●	●	●	●	●	●	–	●
Chloroethanol	●	–	–	●	●	–	–	–	–	–	–	–	–	–	–	●	–	–
Chloroform	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Chromic Acid (10%)	●	–	●	●	●	–	–	●	–	●	●	●	●	●	●	●	–	●
Citric Acid	●	●	●	●	●	●	–	●	●	●	●	●	●	–	–	●	●	●
Coffee	●	–	●	●	●	–	–	–	–	●	●	●	–	●	●	–	–	–
Copper Nitrate	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	●	–	–
Copper Nitrite	●	–	–	●	●	–	–	–	–	–	–	–	–	–	–	–	–	–
Copper Sulfate (10%)	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	●	–	●
Copper Sulfide	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cyanic Acid	–	●	–	●	●	–	–	–	–	●	●	–	–	–	–	–	–	–
Cyclohexane	●	●	–	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Cyclohexanol	●	●	–	●	●	–	–	–	–	●	●	●	●	–	–	●	–	●
D.D.T. (Dichlorodiphenyltrichloroethane)	–	–	–	–	●	–	–	–	–	●	–	●	●	–	–	●	–	–
Deionized Water	●	●	●	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Denatured Alcohol	●	–	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Detergent Solutions	●	–	●	●	●	–	–	–	–	●	●	●	●	–	–	●	–	–
Dibutyl Phthalate	●	●	●	●	●	–	–	●	–	●	●	●	●	–	–	●	–	●
Dichloroethane	–	–	●	●	●	–	–	●	–	●	●	●	–	–	–	–	–	–
Diesel Fuel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Dimethyl Phthalate	●	–	–	●	●	–	–	–	–	●	●	●	–	●	●	–	–	●
Dioxane	●	–	●	●	●	●	–	●	●	●	●	●	●	●	●	–	–	●
Dioxolane	–	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Diphenil	●	●	●	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Diphenil Ether	●	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diphenil Oxide	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Distilled Water	●	●	●	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Ethane	●	●	●	●	●	–	–	●	–	●	●	●	–	–	–	–	–	–
Ethanol (Ethyl Alcohol)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–
Ether	●	●	●	●	●	–	–	–	●	●	●	●	–	–	–	–	–	–
Ether Sulfate	–	●	–	●	–	–	–	–	–	–	–	–	–	–	–	●	–	●
Ethyl Acetate	●	●	–	●	●	●	–	●	–	–	●	●	●	●	●	●	●	●
Ethyl Benzene	●	●	–	●	●	–	–	–	–	●	–	–	–	●	●	●	–	●
Ethyl Chloride	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	●	–	●
Ethyl Chloride Wet	●	–	–	●	●	–	–	–	–	–	–	–	–	–	–	–	–	–
Ethyl Ether	●	●	●	●	●	●	–	–	●	●	●	●	●	–	–	●	–	●
Ethyl Sulfate	–	–	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Ethylene Chloride	●	–	–	●	●	●	–	–	–	●	●	●	–	●	●	–	–	–
Ethylene Glycol	●	●	●	●	●	●	–	●	–	●	●	●	●	–	–	●	●	●
Ethylene Oxide	●	●	●	●	●	–	–	●	–	●	●	●	●	–	–	–	–	●
Fatty Acids	●	●	●	●	●	–	–	●	–	●	●	●	●	–	–	●	–	–
Ferric Chloride	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	●	–	●
Ferric Hydroxide	–	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Ferric Nitrate	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	–
Ferric Sulfate	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	●	–	●
Fluorine	●	●	–	●	●	–	–	●	–	–	●	●	●	–	–	●	–	●
Fluorine (Anydrous)	●	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–
Fluorine (Liquid)	●	–	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Fluorine Gas Dry	●	–	–	●	●	–	–	–	–	–	–	–	●	–	–	●	–	●
Fluorine Gas Wet	●	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fluorobenzene	●	–	–	–	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Fluorocarbon Oils	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Food Oils (vegetable)	●	●	●	●	●	–	–	–	–	●	●	–	●	–	–	●	●	●
Formaldehyde (37%)	●	●	●	●	●	●	●	●	●	●	●	●	●	–	–	●	–	●
Formic Acid	●	●	●	●	●	●	–	●	●	●	●	●	●	–	–	●	●	●
Freon 11	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 112	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 113	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 114	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 114B2	●	●	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 115	●	●	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–

Chemical compatibility chart

MEDIUM	FITTINGS									SEALS			HOSES					
	ALUMINIUM	CARBON STEEL	BRASS	INOX AISI316L	POM	PEI	PARA	PBT	PPSU	NBR	FPM/FKM	EPDM	PA 11-12	PA6	PA6.6	LDPE	PU Ether base	PTFE
Freon 12	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	●
Freon 13	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 13B1	●	●	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 14	●	●	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 142B	●	–	–	–	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 15	●	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–
Freon 152A	●	–	–	–	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 21	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 218	●	–	–	–	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 21B	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Freon 22	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	–
Freon 31	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 32	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Freon 502	●	–	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Fresh Water	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	●	●	–
Fruit Juice	●	●	●	●	●	●	●	●	●	●	●	–	●	–	–	●	–	●
Fuel Oils	●	●	●	●	●	–	–	●	●	●	●	●	●	–	–	●	–	●
Gasoline	●	●	●	●	●	●	●	–	●	●	●	●	●	–	–	–	–	●
Glucose	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	●	–	●
Glycerine	●	●	●	●	●	●	●	–	●	●	●	●	●	●	●	●	–	●
Glycolic Acid	–	–	–	●	●	–	–	–	–	●	●	●	–	–	–	●	–	–
Glycols	●	●	●	●	●	●	–	–	●	●	●	●	●	●	●	●	●	●
Grease (Ester Base)	●	●	●	●	●	–	–	–	–	–	–	●	–	–	–	–	–	–
Grease (Petroleum Base)	●	●	●	●	●	–	–	–	–	–	–	●	–	–	–	–	–	–
Grease (Silicon Base)	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Helium	●	–	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Heptane	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Hexane	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Hexanol	●	●	–	●	●	–	–	–	–	–	–	–	–	–	–	–	–	–
Hydraulic Oil (Petroleum Base)	●	●	●	●	●	–	–	●	–	●	●	●	–	●	●	–	–	–
Hydraulic Oil (Synthetic Base)	●	●	●	●	●	–	–	●	–	●	●	●	–	●	●	–	–	–
Hydrazine	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	●
Hydrochloric Acid (10%)	●	●	●	●	●	●	–	●	●	●	●	●	●	●	●	●	–	●
Hydrocyanic Acid	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●
Hydrofluoric Acid (10%)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Hydrogen (gas)	●	●	●	●	●	–	–	●	–	●	●	●	●	●	●	–	–	●
Hydrogen Peroxide (1%)	–	–	●	●	●	●	–	●	●	●	●	●	●	●	●	●	●	●
Hydrogen Peroxide (30%)	●	●	●	●	●	●	–	●	●	●	●	●	●	●	●	–	–	●
Hydrogen Sulfide	●	●	●	●	●	–	–	●	–	●	●	●	●	●	●	●	–	●
Ink (Printers)	●	●	–	●	●	–	–	●	–	●	●	–	–	●	●	–	–	–
Iodine	●	●	●	●	●	●	–	●	●	●	●	●	–	●	●	●	–	●
Iodoform	●	–	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Iso Butane	–	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Isooctane	●	●	●	●	●	●	●	●	●	●	●	●	–	–	–	●	–	●
Isopentane	–	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Isopropyl Acetate	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Isopropyl Alcohol	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	–	–	●
Isopropyl Ether	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●
Isotane	●	–	–	–	–	–	–	–	–	●	●	–	–	–	–	–	–	–
Jet Fuel/Kerosene	●	●	●	●	●	●	–	–	●	●	●	●	●	●	●	●	–	●
Ketones	●	●	●	●	●	–	–	●	●	●	●	●	–	–	–	–	–	–
Lactic Acid (20 °C)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Lead Acetate	●	●	●	●	●	–	–	●	–	●	●	●	–	–	–	●	–	●
Lead Chloride	●	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Lead Nitrate	●	–	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Lead Sulfamate	●	–	–	●	●	–	–	–	–	–	●	●	–	–	–	–	–	–
Linoleic Acid	●	●	●	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Lithium Bromide	–	–	–	–	–	–	–	●	–	●	●	●	–	–	–	●	–	–
Lithium Chloride	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	●
Lithium Hydroxide	●	–	–	●	●	–	–	●	–	●	●	●	–	–	–	–	–	–
Lubricants	●	●	●	●	●	–	–	●	–	●	●	●	●	●	●	●	–	●
Lubricants (Petroleum)	●	–	–	●	●	–	–	–	–	–	–	●	–	–	–	–	–	–
Lubricating Oil	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	●
Methane	●	–	●	●	●	–	–	●	–	●	●	●	●	●	●	–	–	●
Methyl Acetate	●	●	●	●	●	–	●	●	–	●	●	●	●	–	–	●	–	●
Methyl Acetone	●	●	●	●	●	–	–	–	–	–	●	●	–	–	–	–	–	–

Chemical compatibility chart

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Methyl Acrylic Acid	–	–	–	–	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Methyl Alcohol (Methanol)	●	–	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	–
Methyl Amine	●	●	●	●	●	–	–	–	–	●	–	–	–	–	–	–	–	–
Methyl Bromide	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	●	–	–
Methyl Butyl Ketone	●	–	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Methyl Chloride	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	●	–	–
Methyl Ethyl Ketone	●	●	●	●	●	–	–	●	●	●	●	●	●	●	●	●	–	●
Methylene Bromide	●	–	–	–	●	–	–	–	–	–	●	●	–	–	–	–	–	–
Methylene Chloride	●	●	●	●	●	–	●	●	●	●	●	●	●	–	–	●	–	●
Mineral Oil	●	●	●	●	●	●	–	●	–	●	●	●	●	●	●	●	–	●
Motor Oil	●	●	●	●	●	–	–	–	●	●	●	●	●	–	–	●	–	–
Muriatic Acid	●	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–	–
Naphtha	●	●	●	●	●	●	–	●	–	●	●	●	●	–	–	●	–	●
Naphthalene	●	●	●	●	●	●	–	●	–	●	●	●	●	●	●	●	–	●
Natural Gas	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Neohexane	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Nickel Acetate	●	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–
Nickel Chloride	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●
Nickel Nitrate	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	●	–	–
Nickel Sulfate (10%)	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●
Nitric Acid (10%)	●	●	●	●	●	●	–	●	●	●	●	●	●	●	●	●	–	●
Nitrogen	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	–	–	●
Nitromethane	●	●	●	●	●	–	–	–	–	●	●	●	–	●	●	●	–	●
Nitropropane	●	–	●	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Nitrous Acid	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Nitrous Gases	–	●	●	●	●	–	–	–	–	●	●	–	–	–	–	–	–	–
Nitrous Oxide	●	●	●	●	●	–	–	●	–	●	●	●	–	–	–	–	–	–
Oleic Acid	●	●	●	●	●	–	–	–	●	●	●	●	●	●	●	●	●	●
Olive Oil	●	●	●	●	●	●	–	●	●	●	●	●	●	●	●	●	●	●
Oxigen (Cold)	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	●	●
Ozone	●	●	●	●	●	●	–	●	●	●	●	●	●	●	●	●	–	●
Palm Oil	●	●	●	●	●	–	–	●	–	●	●	●	●	–	–	●	–	●
Palmitic Acid	●	–	●	●	●	–	–	●	–	●	●	●	–	–	–	●	–	●
Paraffin	●	●	●	●	●	●	–	●	●	●	●	●	–	●	●	●	–	●
Paraformaldehyde	●	●	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pentane	●	–	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Perchloric Acid (10%)	–	–	–	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●
Perchloroethylene	●	●	●	●	●	●	●	–	●	●	●	●	●	–	–	●	–	●
Petroleum Oil	●	–	●	●	●	–	–	●	●	●	●	●	●	●	●	●	–	●
Phenol	●	–	●	●	●	–	–	●	●	●	●	●	●	●	●	●	–	●
Phenyl Acetate	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Phenyl Ethyl Ether	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Phenyl Hydrazine	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Phenyl Sulfonic Acid	●	–	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Phenylbenzene	–	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–
Phosphoric Acid (30%)	●	–	●	●	●	–	–	●	●	●	●	●	●	●	●	●	–	●
Phosphorus	●	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–	–
Phthalic Acid	●	–	–	●	●	–	–	●	–	●	●	●	–	–	–	●	–	–
Potassium Acetate	●	●	●	●	●	–	–	–	–	●	–	–	–	–	–	●	–	–
Potassium Bicarbonate	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	–
Potassium Bisulfate	●	–	–	–	–	–	–	–	–	●	●	●	–	–	–	●	–	–
Potassium Bisulfite	●	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Potassium Bromide	●	●	–	●	●	–	–	●	–	●	●	●	●	–	–	●	–	–
Potassium Chloride	●	●	●	●	●	–	–	●	–	●	●	●	●	–	–	●	–	●
Potassium Chromate	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	–
Potassium Cyanide	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●
Potassium Hydroxide	●	●	●	●	●	–	–	●	●	●	●	●	●	●	●	●	–	●
Potassium Hypochlorite	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	●	–	–
Potassium Nitrate	●	●	●	●	●	–	–	●	–	●	●	●	●	–	–	●	–	–
Potassium Nitrite	●	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Potassium Permanganate (10%)	●	●	●	●	●	–	–	●	●	●	●	●	●	●	●	●	–	●
Potassium Phosphate	●	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Potassium Silicate	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Potassium Sulfate	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	●
Potassium Sulfide	●	●	●	●	–	–	–	–	–	●	●	●	–	–	–	●	–	–
Potassium Sulfite	●	●	●	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–

Chemical compatibility chart

MEDIUM	FITTINGS									SEALS			HOSES					
	ALUMINIUM	CARBON STEEL	BRASS	INOX AISI316L	POM	PEI	PARA	PBT	PPSU	NBR	FPM/FKM	EPDM	PA 11-12	PA6	PA6.6	LDPE	PU Ether base	PTFE
Propane (liquefied)	●	●	●	●	●	–	–	●	–	●	●	●	●	–	–	–	–	●
Salicylic Acid	●	●	–	●	●	–	–	●	–	●	●	●	●	●	●	●	–	●
Sea Water	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	●	●
Silicone Oil	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Silver Bromide	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Silver Chloride	●	●	●	●	–	–	–	–	–	●	–	–	–	–	–	–	–	–
Silver Cyanide	●	–	–	●	–	–	–	–	–	●	●	●	–	–	–	●	–	●
Silver Nitrate	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●
Sodium Acetate	●	●	●	●	●	–	–	–	–	●	●	–	●	–	–	●	–	●
Sodium Acid Sulfate	●	–	–	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Sodium Bicarbonate	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	●
Sodium Bisulfate	●	●	–	●	●	–	–	–	–	●	●	●	●	–	–	●	●	●
Sodium Bisulfite	●	●	●	●	●	●	●	●	●	●	●	●	–	–	–	●	–	●
Sodium Borate (Borax)	●	–	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Sodium Carbonate	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Sodium Chlorate	●	–	●	●	●	–	–	●	–	●	●	●	●	–	–	●	–	●
Sodium Chloride (10%)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Sodium Chromate	●	●	–	●	●	–	–	–	–	●	●	●	–	–	–	●	–	–
Sodium Citrate	–	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Sodium Fluoride	●	●	–	●	–	–	–	–	–	●	●	●	–	–	–	●	–	–
Sodium Hydroxide (10%) - Caustic Soda	●	●	●	●	●	●	–	●	●	●	●	●	●	–	–	●	–	●
Sodium Hypochlorite (5%)	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	–
Sodium Hyposulfate	●	●	●	●	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Sodium Hyposulfite	●	●	●	●	–	–	–	●	–	●	●	●	–	–	–	–	–	–
Sodium Nitrate	●	●	●	●	●	–	–	●	–	●	●	●	●	–	–	●	●	●
Sodium Nitrite	●	–	–	–	–	–	–	–	–	–	–	–	●	●	●	●	–	–
Sodium Perborate	●	●	●	●	●	–	–	–	–	●	●	●	–	●	●	–	–	–
Sodium Peroxide	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●
Sodium Phosphate	●	–	●	●	●	–	–	–	–	●	●	●	●	–	–	●	–	–
Sodium Sulfide	●	●	●	●	●	–	–	–	–	●	●	●	●	–	–	–	●	–
Steam (< 150 °C)	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Steam (> 150 °C)	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	–
Stearic Acid	●	●	●	●	●	–	–	●	–	●	●	●	●	–	–	●	–	●
Styrene	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	●
Sulfamic Acid (10% - 20°C)	●	–	–	–	●	–	–	–	●	●	●	●	–	–	–	–	–	–
Sulfur Chloride	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	–	–	●
Sulfur Dioxide	●	●	●	●	●	–	–	●	–	●	●	●	●	●	●	●	–	–
Sulfuric Acid (30%)	●	●	●	●	●	●	–	–	●	●	●	●	●	●	●	●	–	●
Sulfurous Acid	●	●	●	●	●	–	–	●	–	●	●	●	–	–	–	–	–	–
Tannic Acid	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●
Tartaric Acid	●	●	●	●	●	–	–	●	–	●	●	●	●	●	●	●	–	●
Tetrachloroethane	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●
Tetrachloroethylene	●	●	●	●	●	–	–	–	–	●	●	●	–	●	●	–	–	–
Tetrahydrofuran	●	–	–	●	●	–	–	–	–	●	●	●	●	–	–	●	–	●
Toluene (Toulol)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Tomato Jiuce	●	–	–	●	●	–	–	–	–	●	●	●	●	–	–	●	–	●
Transformer Oil	●	–	●	●	●	–	–	●	●	●	●	●	–	●	●	–	–	–
Transmission Fluid (Type A)	●	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–	–
Triacetin	●	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Trichloroacetic Acid	●	●	●	●	●	–	–	●	–	●	●	●	–	–	–	–	–	–
Trichlorobenzenes	●	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–
Trichloroethane	●	●	–	●	●	–	–	–	●	●	●	●	●	●	●	●	–	–
Trichloroethylene	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Trichloropropane	●	●	●	●	●	–	–	–	–	●	●	–	–	–	–	–	–	–
Turpentine	●	–	●	●	●	–	–	●	–	●	●	●	●	●	●	●	–	●
Urea (5%)	●	●	●	●	●	–	–	●	●	●	●	●	●	●	●	●	●	●
Uric Acid	●	●	–	●	●	–	–	●	–	●	●	●	●	●	●	●	–	–
Valeric Acid	●	–	–	–	–	–	–	–	–	●	●	●	–	–	–	–	–	–
Vinegar	●	●	●	●	●	–	–	–	–	●	●	●	●	●	●	●	–	–
Wine	●	●	●	●	●	–	–	–	●	●	●	●	●	●	●	●	–	●
Xylene	●	●	●	●	●	●	–	●	●	●	●	●	●	●	●	●	–	●
Zinc Acetate	●	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–
Zinc Carbonate	●	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Zinc Chloride	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	–	●
Zinc Hydrosulfite	●	●	–	●	●	–	–	–	–	–	–	●	–	–	–	–	–	–
Zinc Nitrate	–	–	–	●	–	–	–	●	–	●	●	●	–	–	–	–	–	–
Zinc Sulfate	●	●	●	●	●	–	–	–	–	●	●	●	–	–	–	●	–	●

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