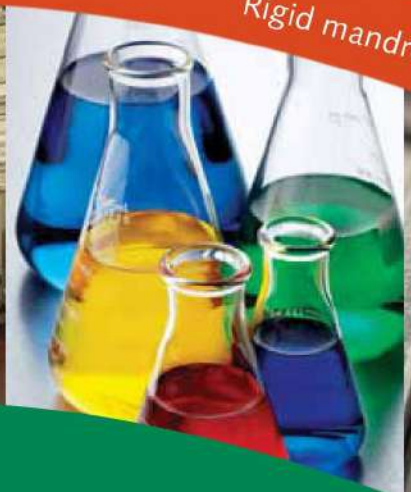
TUDERTECHNICA

Rigid mandrel hose for specialized industries and applications.



FOOD & BEVERAGE

CHEMICAL

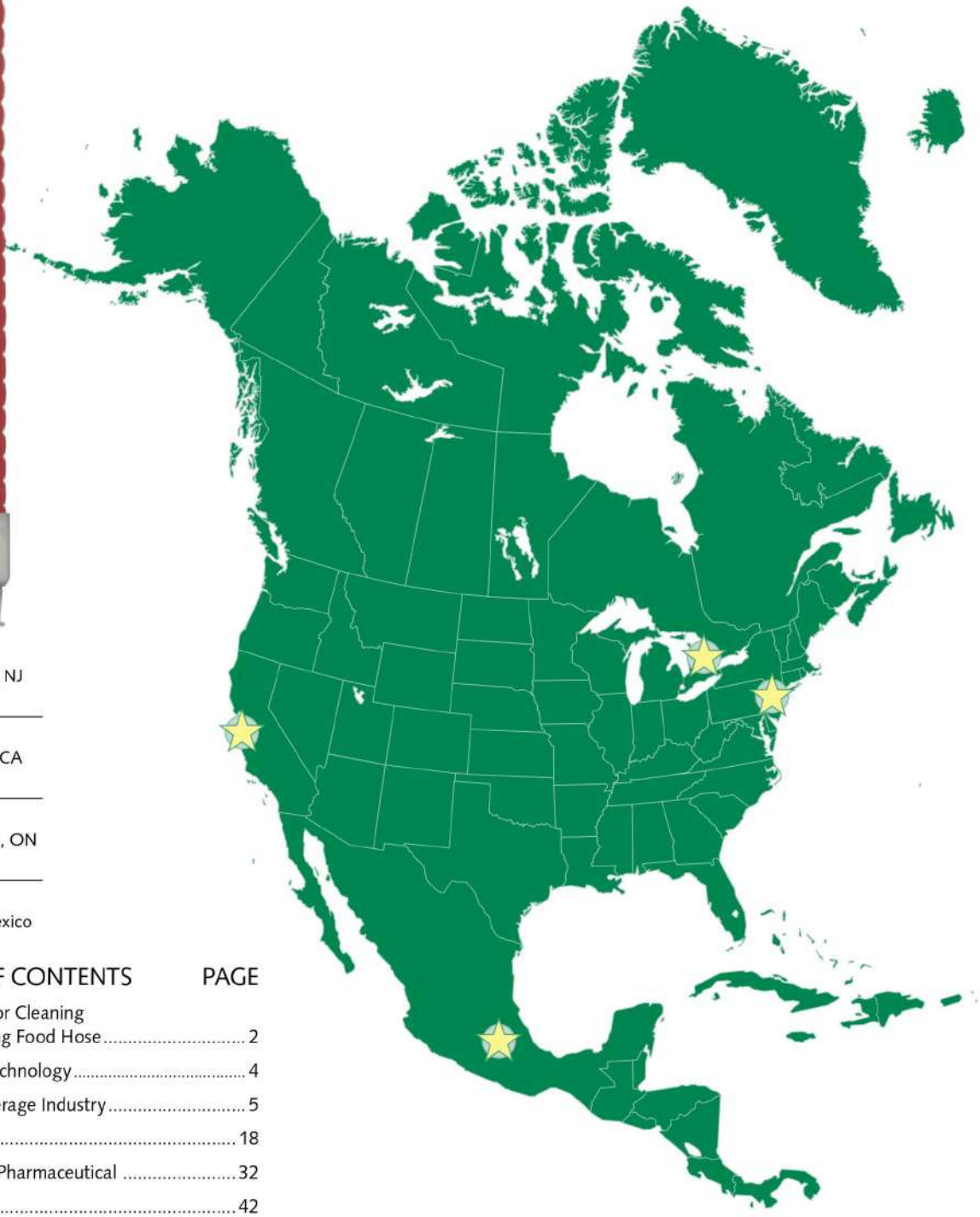
COSMETIC & PHARMACEUTICAL

SPECIALTY

SP TECHNOLOGY

At CRP, we're big enough to help, but small enough to care.

WITH MORE THAN 30 YEARS IN THE HOSE BUSINESS, CRP UNDERSTANDS THE CHALLENGES AND NEEDS OF CUSTOMERS ACROSS ALL INDUSTRIES.



Cranbury, NJ

Fremont, CA

Mississauga, ON

Puebla, Mexico

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GUIDELINES FOR CLEANING AND SANITIZING FOOD HOSE

PREFACE

The cleaning and sanitizing suggestions below are guidelines only.

It is necessary that all applicable government regulations pertaining to the cleaning and sanitizing of food hose and food hose assemblies be followed and adhered to. Further, any governmental regulations supersede the guidelines contained herein.

The life of the hose is affected by the cleaning and sanitizing process due to the mechanical and chemical stresses which occur during the cleaning and sanitizing procedure. The service period of rubber hoses is dependent on their formulation and the environment of use which in turn is influenced by the product, process temperature, cleaning and bactericidal compounds, and time of exposure. Users should frequently monitor the physical condition of the rubber hose cover for cracks, cuts, damage or excessive wear. Such observations are necessary to determine the actual sanitary service period of rubber hoses. It is further recommended that the rubber hose be replaced before surface imperfections or sloughing occurs. Routine replacement schedules should be established and followed.

Food hose users should be guided by their own, if applicable, or specific industry cleaning and sanitizing procedures and standards. For example, the wine industry may have different standards than the dairy industry and any standards applicable to a specific industry supersede the guideline contained herein.

The cleaning and sanitizing of food hose and hose assemblies is intended to remove any food particles or residues including detergents or disinfectant that may be the source of harmful bacteria microorganism or other sources of contamination. The effectiveness of the guidelines contained herein are dependent upon the practices and care taken by the user.

CLEANING AND SANITIZING STEPS

1. FREQUENCY

The frequency of the cleaning and sanitizing cycle needs to be done according to the type of food or beverage being conveyed and the contamination risk level. In principle, the cleaning and sanitizing process should be conducted on a frequent basis.

2. WASHING

Thoroughly washing the hose with hot potable water is the first step in the cleaning process.
Washing with hot potable water will facilitate the cleaning of the hose but does not eliminate the need to clean the hose with the appropriate detergent followed by the disinfection of the hose. The temperature of the hot water and duration of the washing/rinsing cycle will depend upon the characteristic of the material/products being conveyed.

The initial washing/rinsing with hot potable water should be completed as soon as possible after the conveyance process is completed. All residual water and residue from the initial washing/rinsing cycle must be drained away completely.

3. CLEANING/DISINFECTING

The selection of a specific detergent and of a specific disinfectant will depend on the material/products being conveyed. The recommendation of the manufacturer of the detergent and of the disinfectant should be strictly followed especially regarding concentration levels.

After cleaning the hose with detergent followed by rinsing with potable water, the hose must be sterilized either with steam or with chemical solution.

Steam is classified as "Physical" disinfectants: its effectiveness in eliminating bacteria and other contaminants varies according to the material/products being conveyed and the procedure employed by the users.

Chemical disinfectant such as caustic soda, nitric acid, per-acetic acid, phosphoric acid, chloroacetic acid or other acids suitable for disinfecting food hoses must be carefully selected to ensure optimal effectiveness while also assuring maximum safety and health. When selecting a particular disinfectant it is necessary to pay strict attention to concentration levels, temperature, cycle time, etc. The type of product/material being conveyed must be taken into consideration when selecting a specific disinfectant.

As soon as the disinfecting treatment with chemical solutions is made, the hose must be carefully and sufficiently rinsed with potable water to eliminate any chemical residue from the disinfecting treatment.

4. PROCESS CONTROLS

The result of the cleaning and sanitizing process must be regularly checked to ensure that all contamination and residuals have been eliminated. Any non-conforming events need to be addressed and corrective action taken.

TUDERTECHNICA hoses are suitable for steam sterilization temperatures up to 250°F (121°C) for 30 minutes or a bactericidal treatment with chemical solutions at a temperature up to 180°F (82°C). Maximum temperature depends on the chemical solution and its concentration. Specifically, our silicone hoses can be sterilized with steam up to 275°F (135°C) for 18 minutes. Please take note of the following recommendation for cleaning and sterilization of hoses with PU tube (TUSILO/PU FORM): chemical solution only, temperature up to 180°F (82°C) max.

If not adhered to, hose life can be decreased. Deviation from the established cleaning/disinfecting process can seriously reduce the life of the hose.

GLIDETECH TECHNOLOGY

TUDERTECHNICA PRODUCT FEATURES

Lightweight Very Flexible	〉	Easy To Handle
Low Drag Resistance	〉	Easy To Slide
Abrasion, Oil and Chemical Resistant Smooth Glossy Cover		
Ozone & Fade Resistance Cover Guards Against Premature Aging		
Glossy Cover Resists Dirt And Mold	〉	Easy To Clean

TUDERTECHNICA VALUE ADVANTAGES

GlideTech Ergonomics Features	〉	Operator Satisfaction And Safety	〉	Increased Productivity
Superior Abrasion Resistance	〉	Durability And Longer Life		

TUDERTECHNICA

Food & Beverage Industry

TUDERTECHNICA Food & Beverage hoses are the choice of experts with a taste for the best.

Featuring new GLIDETECH® Technology covers. Built from the core out on a proprietary rigid mandrel frame, TUDERTECHNICA hoses for the Food & Beverage industry incorporate liners, plies, and covers chosen specifically for each individual application. All are phthalates-free and meet every applicable government food-safety standard in the U.S., Europe, and Japan — including a 3A Sanitary Standard Class II rating.

Here are just a few benefits designed into TUDERTECHNICA Food & Beverage hoses:

- Abrasion Resistant Cover (non-marking in many cases) lasts longer
- Flexible design permits optimum bend radius for easier routing
- Easy to clean glossy cover and smooth bore tube
- Mold resistant

TUDERTECHNICA has been making high-quality industrial hose since 1983 and is the choice of many Food & Beverage makers, including over 2,000 European wineries.

TUDERTECHNICA hose is available in the NAFTA

GLIDETECH® VINEYARD 8000 SERIES

Extra flexible suction and delivery hose suitable for wine and vinification by-products. Phthalates free.

DESCRIPTION

Tube	NR, white. Meets FDA 21 CFR 177.2600, BFR RECOMMENDATION XXI cat 2, DM 21.03.73 e seguenti and JAPAN-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006. RAL REGISTRATION G-72.
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, red, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean.
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH® VINEYARD

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/176°F (-40°C / +80°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8003-075	19	.75	1.22	10	150	30	450	0,72	.49	60	2.36
8003-100	25	1	1.46	10	150	30	450	0,83	.56	70	2.76
8003-150	38	1.5	2.00	10	150	30	450	1,28	.87	80	3.15
8003-200	51	2	2.52	10	150	30	450	1,62	1.10	100	3.94
8003-250	63.5	2.5	3.09	10	150	30	450	2,23	1.52	130	5.12
8003-300	76	3	3.62	10	150	30	450	2,83	1.92	150	5.91
8003-400	102	4	4.65	10	150	30	450	3,76	2.56	250	9.80

Custom colors and sizes available upon request.
Standard Color: Red

GLIDETECH® VINEYARD HP 8020 SERIES

Extra flexible suction and delivery hose suitable for wine and vinification by-products. Phthalates free.

DESCRIPTION

Tube	NR, white. Meets FDA 21 CFR 177.2600, BFR RECOMMENDATION XXI cat 2, DM 21.03.73 e seguenti and JAPAN-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006. RAL REGISTRATION G-72.
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, red, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean.
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH® VINEYARD

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/176°F (-40°C / +80°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8023-100	25	1	1.52	17	250	62	900	0,97	.65	105	4.13
8023-150	38	1.5	2.09	17	250	62	900	1,40	.94	120	4.72
8023-200	51	2	2.66	17	250	62	900	2,14	1.44	150	5.91
8023-250	63.5	2.5	3.19	17	250	62	900	2,81	1.89	195	7.68
8023-300	76	3	3.72	17	250	62	900	3,50	2.35	225	8.86
8023-400	102	4	4.75	17	250	62	900	4,55	3.06	375	14.76

Custom colors and sizes available upon request.
Standard Color: Red

GLIDETECH® VINEYARD CRUSH RESISTANT 8010 SERIES

Suction and delivery hose suitable for wine and vinification by-products. Crush resistant. Phthalates free.

DESCRIPTION

Tube	NR, white. Meets FDA 21 CFR 177.2600, BFR RECOMMENDATION XXI cat 2, DM 21.03.73 e seguenti and JAPAN-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006. RAL REGISTRATION G-72.
Reinforcement	Synthetic plies, thermoplastic wire helices
Cover	Wide corrugated, red, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean.
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH® VINEYARD

TUDERTECHNICA GLIDETECH® VINEYARD

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/176°F (-40°C / +80°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8013-075	19	.75	1.22	10	150	30	450	0,65	.44	100	3.94
8013-100	25	1	1.46	10	150	30	450	0,77	.52	125	4.92
8013-150	38	1.5	2.00	10	150	30	450	1,08	.73	190	7.48
8013-200	51	2	2.52	10	150	30	450	1,42	.95	255	10.04
8013-250	63.5	2.5	3.09	10	150	30	450	2,39	1.61	340	13.39
8013-300	76	3	3.62	10	150	30	450	3,16	2.12	430	16.93

Custom colors and sizes available upon request.
Standard Color: Red

GLIDETECH® BUTYL 8100 SERIES

Premium grade low permeation extra flexible suction and delivery hose suitable for wine and spirits.
Phthalates free.

DESCRIPTION

Tube	IIR, white. Meets FDA 21 CFR 177.2600, DM 21.03.73 e seguenti and JAPAN-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006.
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, red, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean.
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH® VINEYARD

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/248°F (-40°C / +120°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8103-075	19	.75	1.22	10	150	30	450	0,69	.49	60	2.36
8103-100	25	1	1.46	10	150	30	450	0,83	.56	70	2.76
8103-150	38	1.5	2.00	10	150	30	450	1,28	.87	80	3.15
8103-200	51	2	2.52	10	150	30	450	1,62	1.10	100	3.94
8103-250	63.5	2.5	3.09	10	150	30	450	2,23	1.52	130	5.12
8103-300	76	3	3.62	10	150	30	450	2,83	1.92	150	5.91
8103-400	102	4	4.65	10	150	30	450	3,76	2.56	250	9.80

Custom colors and sizes available upon request.
Standard Color: Red

GLIDETECH® BUTYL HP 8120 SERIES

Premium grade low permeation extra flexible suction and delivery hose suitable for wine and spirits. Phthalates free.

DESCRIPTION

Tube	IIR, white. Meets FDA 21 CFR 177.2600, DM 21.03.73 e seguenti and JAPAN-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006.
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, red, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean.
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH® VINEYARD

TUDERTECHNICA GLIDETECH BUTYL

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/248°F (-40°C / +120°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8123-100	25	1	1.52	17	250	62	900	0,90	.60	105	4.13
8123-150	38	1.5	2.09	17	250	62	900	1,30	.87	120	4.72
8123-200	51	2	2.66	17	250	62	900	1,99	1.34	150	5.91
8123-250	63.5	2.5	3.19	17	250	62	900	2,61	1.75	195	7.68
8123-300	76	3	3.72	17	250	62	900	3,26	2.19	225	8.86
8123-400	102	4	4.75	17	250	62	900	4,23	2.84	375	14.76

Custom colors and sizes available upon request.
Standard Color: Red

GLIDETECH® DISTILLERY 8200 SERIES

Extra flexible suction and delivery hose suitable for distilled and distillation by-products with alcohol concentration up to 96%. Phthalates free.

DESCRIPTION

Tube	UHMW, translucent. Meets FDA 21 CFR 177.1520, BfR CHAP III and DM 21.03.73 e seguenti, JAPAN-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006.
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, green, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean.
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH® DISTILLERY

TECHNICAL CHARACTERISTICS

Temperature Range	-22°F/194°F (-30°C / +90°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8206-075	19	.75	1.22	10	150	30	450	0,71	.48	80	3.15
8206-100	25	1	1.46	10	150	30	450	0,86	.58	100	3.94
8206-150	38	1.5	2.00	10	150	30	450	1,14	.77	150	5.91
8206-200	51	2	2.52	10	150	30	450	1,49	1.00	200	7.87
8206-250	63.5	2.5	3.09	10	150	30	450	2,02	1.36	260	10.24
8206-300	76	3	3.62	10	150	30	450	2,52	1.70	350	13.78
8206-400	102	4	4.65	10	150	30	450	3,79	2.55	500	19.69

Custom colors and sizes available upon request.
Standard Color: Green

GLIDETECH® NITRILE 8300 SERIES

Extra flexible suction and delivery hose suitable for fatty and non-fatty food products. Phthalates free.

DESCRIPTION

Tube	Nitrile, white. Meets FDA 21 CFR 177.2600, BFR RECOMMENDATION XXI cat 2, DM 21.03.73 e seguenti and JAPAN-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006. Ral registration G-73.
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, blue, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean.
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH® NITRILE

TECHNICAL CHARACTERISTICS

Temperature Range	-13°F/176°F (-25°C/+80°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8301-075	19	.75	1.22	10	150	30	450	0,74	.50	60	2.36
8301-100	25	1	1.46	10	150	30	450	0,90	.60	70	2.76
8301-150	38	1.5	2.00	10	150	30	450	1,20	.80	80	3.15
8301-200	51	2	2.52	10	150	30	450	1,56	1.05	100	3.94
8301-250	63.5	2.5	3.09	10	150	30	450	2,12	1.42	130	5.12
8301-300	76	3	3.62	10	150	30	450	2,65	1.78	150	5.91
8301-400	102	4	4.65	10	150	30	450	3,98	2.67	250	9.80

Custom colors and sizes available upon request.
Standard Color: Blue

GLIDETECH® EPDM 8400 SERIES

Extra flexible suction and delivery hose suitable for a wide range of food products. Not recommended for fat and oil. Phthalates free.

DESCRIPTION

Tube	EPDM, white. Meets FDA 21 CFR 177.2600, BFR RECOMMENDATION XXI cat 2, DM 21.03.73 e seguenti and JAPAN-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006. Ral registration G-74.
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, green, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean.
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH® EPDM

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F /248°F (-40°C / +120°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8406-075	19	.75	1.22	10	150	30	450	0,74	.47	60	2.36
8406-100	25	1	1.46	10	150	30	450	0,90	.58	70	2.76
8406-150	38	1.5	2.00	10	150	30	450	1,20	.77	80	3.15
8406-200	51	2	2.52	10	150	30	450	1,56	1.00	100	3.94
8406-250	63.5	2.5	3.09	10	150	30	450	2,12	1.36	130	5.12
8406-300	76	3	3.62	10	150	30	450	2,65	1.70	150	5.91
8406-400	102	4	4.65	10	150	30	450	3,98	2.55	250	9.80

Custom colors and sizes available upon request.
Standard Color: Green

GLIDETECH® DAIRY 8500 SERIES

Extra flexible suction and delivery hose suitable for milk, milk by-products and non fatty food products. Phthalates free.

DESCRIPTION

Tube	NR, white. Meets FDA 21 CFR 177.2600, BFR RECOMMENDATION XXI cat 2, DM 21.03.73 e seguenti and JAPAN-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006. Ral registration G-72.
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, blue, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean.
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH® DAIRY

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/248°F (-40°C /+120°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8501-075	19	.75	1.22	10	150	30	450	0,81	.54	70	2.76
8501-100	25	1	1.46	10	150	30	450	0,94	.63	90	3.54
8501-150	38	1.5	2.00	10	150	30	450	1,44	.97	140	5.51
8501-200	51	2	2.52	10	150	30	450	1,83	1.23	190	7.48
8501-250	63.5	2.5	3.09	10	150	30	450	2,51	1.69	250	9.84
8501-300	76	3	3.62	10	150	30	450	3,19	2.15	300	11.81
8501-400	102	4	4.65	10	150	30	450	4,24	2.86	400	15.75

Custom colors and sizes available upon request.
Standard Color: Blue

DAIRYFLEX *Plus* 8600 SERIES

Light and flexible lorry collecting hose suitable for milk and milk by-products. Phthalates free.

DESCRIPTION

Tube	NR, white. Meets FDA 21 CFR 177.2600, BFR RECOMMENDATION XXI cat 2, DM 21.03.73 e seguenti and JAPAN-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006. Ral registration G-72.
Reinforcement	Synthetic plies, steel wire helices
Cover	Smooth, blue, abrasion resistant rubber, aging and ozone resistant, cloth
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA DAIRYFLEX PLUS

TUDERTECHNICA DAIRYFLEX PLUS

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/176°F (-40°C /+120°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8601-100	25	1	1.46	10	150	30	450	0,83	.56	60	2.36
8601-150	38	1.5	1.97	10	150	30	450	1,26	.85	85	3.35
8601-200	51	2	2.48	10	150	30	450	1,63	1.10	105	4.13
8601-250	63.5	2.5	2.97	10	150	30	450	2,06	1.38	120	4.72
8601-300	76	3	3.56	10	150	30	450	2,77	1.86	150	5.91
8601-400	102	4	4.59	9	135	27	405	3,63	2.44	250	9.80

Custom colors and sizes available upon request.
Standard Color: Blue

SPIRAL TECH NITRILE 8371 SERIES

Light and flexible lorry collecting hose suitable for fatty and not fatty products. Phthalates free tube, tested in compliance with REACH regulation.

DESCRIPTION

Tube	Nitrile, white, phthalates free, tested in compliance with REACH regulation. Meets FDA 21 CFR 177.2600, BFR RECOMMENDATION XXI CAT 2, DM 21.03.73 e seguenti, European Reglement 1935/2004/CE, Japan-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006. Ral registration G-73.
Reinforcement	Synthetic plies
Cover	Corrugated, blue, abrasion, ageing, ozone and oil resistant, outer thermoplastic helix
Sterilization	According to 3A Sanitary Standard Class II

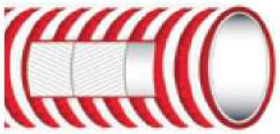
TECHNICAL CHARACTERISTICS

Temperature Range	-13°F/176°F (-25°C /+80°C)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Vacuum		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mmHg	inHg	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8371-200	51	2	-	675	26,6	10	150	30	450	1,62	1.09	100	3.94
8371-250	63.5	2.5	-	600	23,6	10	150	30	450	1,96	1.31	130	5.12
8371-300	76	3	-	600	23,6	10	150	30	450	2,37	1.59	150	5.91
8371-400	102	4	-	525	20,7	10	150	30	450	3,06	2.05	200	7.87
8371-600	152	6	-	300	11,8	5	75	15	225	4,46	2.99	300	11.81

Custom colors and sizes available upon request.
Standard Color: White

SPIRAL TECH BUTYL 8173 SERIES



Premium grade low permeation light and flexible lorry collecting hose suitable for a wide range of products. Recommended for wine and spirits. Phthalates free tube, tested in compliance with REACH regulation.

DESCRIPTION

Tube	IIR, white phthalates free, tested in compliance with REACH regulation. Meets FDA 21 CFR 177.2600, DM 21.03.73 e seguenti, European Reglement 1935/2004/CE, Japan-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006
Reinforcement	Synthetic plies
Cover	Corrugated, red, abrasion, ageing, ozone and oil resistant, outer thermoplastic helix
Sterilization	According to 3A Sanitary Standard Class II

TECHNICAL CHARACTERISTICS

Temperature Range	-13°F/176°F (-25°C /+80°C)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Vacuum		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mmHg	inHg	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8173-150	38	1.5	-	675	26,6	10	150	30	450	1.23	.82	80	3.15
8173-200	51	2	-	675	26,6	10	150	30	450	1,79	1.20	100	3.94
8173-250	63.5	2.5	-	600	23,6	10	150	30	450	2,18	1.46	130	5.12
8173-300	76	3	-	600	23,6	10	150	30	450	2,56	1.72	150	5.91
8173-400	102	4	-	525	20,7	10	150	30	450	3,35	2.24	200	7.87

Custom colors and sizes available upon request.
Standard Color: Red

Chemical

TUDERTECHNICA Chemical hoses

Built from the core out on a proprietary rigid mandrel frame, TUDERTECHNICA hoses for the chemical industries incorporate liners, plies, and covers chosen specifically for each application. Liners are available in PTFE,FEP,PFA,UHMW, and Silicone. The fully conductive hoses are conductive through both tube and cover, as well as utilizing a static wire.

Here are just a few benefits designed into TUDERTECHNICA Chemical hoses:

- Ozone Resistant Cover (abrasion resistant in many cases) lasts longer
- Flexible hoses allow for easier routing
- Choice of liners specific to applications

TUDERTECHNICA has been making high-quality industrial hose since 1983.

TUDERTECHNICA hose is available in the NAFTA

GLIDETECH PTFE BIOTECH CHEM 8767 SERIES

Suction and delivery hose for chemicals and solvents, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium). Hose resistant to high temperatures, used as connection between pipes and fixed equipment. Designed for the chemical industry, food stuff, pharmaceutical and cosmetic industry, where a flexible connection is required. The hose is produced with high quality elastomers, with excellent chemical and mechanical properties. Phthalates free tube, tested in compliance with REACH regulation.

DESCRIPTION

Tube	PTFE (Polytetrafluorethylene) black, conductive, phthalates free, tested in compliance with REACH regulation. PTFE is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.1550 standards.
Reinforcement	Synthetic plies, galvanized wire helices, antistatic wires to discharge static electricity
Cover	Smooth, white with conductive chips, low friction material, non-marking when dragged on the floor, oil, chemical, abrasion, aging and ozone resistant, easy to clean, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Red/white/blue transfer tape TUDERTECHNICA TUFLON PTFE BIOTECH FDA FULL CONDUCTIVE MADE IN ITALY TUDERTECHNICA // TUFLON PTFE BIOTECH FDA

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C/+150°C)
Vacuum	26.6 inHg (0.9 bar)
Electrical Properties	Type Ω/T according to EN 12115 ($R<10^5$ Ω, $R<10^9$ Ω through the hose wall)
Norm	EN12115, 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter		Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8767-050	13	.50	25	.98	40	130	16	235	64	940	0,55	1.21	100	3.94
8767-075	19	.75	31	1.22	40	130	16	235	64	940	0,72	1.59	130	5.12
8767-100	25	1.0	37	1.45	40	130	16	235	64	940	0,89	1.96	180	7.09
8767-125	32	1.25	44	1.73	40	130	16	235	64	940	1,08	2.38	220	8.66
8767-150	38	1.50	51	2.00	40	130	16	235	64	940	1,36	3.00	260	10.24
8767-200	51	2.0	66	2.60	40	130	16	235	64	940	2,48	5.47	330	12.99
8767-250	63.5	2.5	79.5	3.13	20	65*	16	235	64	940	3,47	7.65	440	17.32
8767-300	76	3.0	91	3.58	20	65*	16	235	64	940	3,98	8.77	520	20.47

Data refers to ambient temperature (20°C/68°F); we recommend a reduction of 20% working pressure for every 100°C/212°F of temperature increase.

Custom colors and sizes available upon request. Standard Color: White with Conductive Chips

*Some hoses not available in 130' standard length.

GLIDETECH® UHMW FULL CONDUCTIVE CHEM 8730 SERIES

Suction and delivery hose for chemical products. Phthalates free tube, tested in compliance with REACH regulation.

DESCRIPTION

Tube	UHMW, black, conductive, phthalates free, tested in compliance with REACH regulation, meets FDA 21 cfr 177.1520, BfR CHAP III and DM 21.03.73 e seguenti
Reinforcement	Synthetic plies, a/s copper wire to discharge static electricity, galvanized wire helices
Cover	Wide corrugated, black, conductive, low friction material, non-marking when dragged on the floor, abrasion, ozone, aging, oil and chemical resistant, easy to clean, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH UHMW FULL CONDUCTIVE MADE IN ITALY

TUDERTECHNICA GLIDETECH® UHMW

Embossed stripe according to the Norm EN 12115
TUDERTECHNICA UHMWPE EN12115:2011
DN SD PN 10 BAR W/T Q/Y

TECHNICAL CHARACTERISTICS

Temperature Range	-22°F/212°F (-30°C/+100°C)
Vacuum	26.6 inHg (0.9 bar)
Electrical Properties	Type Ω/T according to norm EN 12115 (R<10^6 Ω, R<10^9 Ω through the hose wall)
Norm	3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8732-100	25	1	1.46	40	130	10	150	40	600	0,75	.50	100	3.94
8732-150	38	1.5	2.00	40	130	10	150	40	600	1,16	.78	150	5.91
8732-200	51	2	2.64	40	130	10	150	40	600	1,96	1.32	200	7.87
8732-300	76	3	3.62	40	130	10	150	40	600	2,79	1.87	350	13.78
8732-400	102	4	4.64	40	130	10	150	40	600	4,11	2.76	500	19.69

Data refer to ambient temperature (20°C/68°F)
Custom colors and sizes available upon request.
Standard Color: Black

GLIDETECH® FEP CHEM 8740 SERIES

Suction and delivery hose for chemicals and solvents, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium). Hose resistant to high temperatures, used as connection between pipes and fixed equipment. Designed for the chemical industry, foodstuff, pharmaceutical and cosmetic industry, where a flexible connection is required. The hose is produced with high quality elastomers, with excellent chemical and mechanical properties. Phthalates free.

DESCRIPTION

Tube	FEP (Fluorinated Ethylene Propylene) white, minimum thickness 0,6 mm. FEP is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.1550, 177.2600 standards, USP XXIII class VI requirements and European Pharmacopoeia 3.1.9, ISO 10993 Sections 5,6,10,11
Reinforcement	Synthetic plies, steel wire helices, a/s copper wires to discharge static electricity
Cover	Wide corrugated, black, conductive, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Red/white/blue transfer tape TUDERTECHNICA GLIDETECH FEP 10 BAR (150 PSI) WP MADE IN ITALY

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C/+150°C) The operating temperature of the hose is directly dependent upon the specific fluid being conveyed and the length of time the fluid is in contact with the hose
Vacuum	26.6 inHg (0.9 bar)
Electrical Properties	Type M according to EN 12115 ($R<10^2\ \Omega$)
Norm	ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter	Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8742-100	25	1	1.46	40	130	10	150	40	580	0,80	.54	130	5.12
8742-150	38	1.5	2.01	40	130	10	150	40	580	1,20	.81	190	7.48
8742-200	51	2	2.60	40	130	10	150	40	580	2,03	1.36	250	9.80
8742-300	76	3	3.58	20	65*	10	150	40	580	3,08	2.07	380	14.96

Data refers to ambient temperature 68°F (20°C).
Custom colors and sizes available upon request.
Standard Color: Black
*Some hoses not available in 130' standard length.

GLIDETECH® FEP CHIPS

8747 SERIES

Suction and delivery hose for chemicals and solvents, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium). Hose resistant to high temperatures, used as connection between pipes and fixed equipment. Designed for the chemical industry, foodstuff, pharmaceutical and cosmetic industry, where a flexible connection is required. The hose is produced with high quality elastomers, with excellent chemical and mechanical properties. Phthalates free.

DESCRIPTION

Tube	FEP (Fluorinated Ethylene Propylene) white, minimum thickness 0,6 mm. FEP is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.1550, 177.2600 standards, USP XXIII class VI requirements and European Pharmacopoeia 3.1.9, ISO 10993 Sections 5,6,10,11
Reinforcement	Synthetic plies, steel wire helices, a/s copper wires to discharge static electricity
Cover	Wide corrugated, white with conductive chips, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Red/white/blue transfer tape TUDERTECHNICA GLIDETECH FEP 10 BAR (150 PSI) WP MADE IN ITALY

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C/+150°C) The operating temperature of the hose is directly dependent upon the specific fluid being conveyed and the length of time the fluid is in contact with the hose
Vacuum	26.6 inHg (0.9 bar)
Electrical Properties	Type M according to EN 12115 ($R<10^2\ \Omega$)
Norm	ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter	Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8747-100	25	1	1.46	40	130	10	150	40	580	0,80	.54	130	5.12
8747-150	38	1.5	2.01	40	130	10	150	40	580	1,20	.81	190	7.48
8747-200	51	2	2.60	40	130	10	150	40	580	2,03	1.36	250	9.80
8747-300	76	3	3.58	20	65	10	150	40	580	3,08	2.07	380	14.96

Data refers to ambient temperature 68°F (20°C)
Custom colors and sizes available upon request.
Standard Color: White with Black Chips

GLIDETECH® PFA CHEM 8750 SERIES

Suction and delivery hose for chemicals and solvents, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium). Hose resistant to high temperatures, used as connection between pipes and fixed equipments. Designed for the chemical industry, foodstuff, pharmaceutical and cosmetic industry, where a flexible connection is required. The hose is produced with high quality elastomers, with excellent chemical and mechanical properties. Phthalates free.

DESCRIPTION

Tube	PFA (perfluoroalkoxy) white, minimum thickness 0, 6mm. PFA is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.2600 standards, USP XXIII class VI requirements and European Pharmacopoeia 3.1.9, ISO 109933 Sections 5,6,10,11
Reinforcement	Synthetic plies, steel wire helices, a/s copper wires to discharge static electricity
Cover	Wide corrugated, black, conductive, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Red/white/blue transfer tape TUDERTECHNICA GLIDETECH PFA 10 BAR (150 PSI) WP MADE IN ITALY

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C/+150°C) The operating temperature of the hose is directly dependent upon the specific fluid being conveyed and the length of time the fluid is in contact with the hose
Vacuum	26.6 inHg (0.9 bar)
Electrical Properties	Type M according to EN 12115 ($R<10^2\ \Omega$)
Norm	ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter	Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8752-100	25	1	1.46	40	130	10	150	40	580	0,80	.54	130	5.12
8752-150	38	1.5	2.01	40	130	10	150	40	580	1,20	.81	190	7.48
8752-200	51	2	2.60	40	130	10	150	40	580	2,03	1.36	250	9.80
8752-300	76	3	3.58	20	65	10	150	40	580	3,08	2.07	380	14.96

Data refers to ambient temperature 68°F (20°C)
Custom colors and sizes available upon request.
Standard Color: Black

GLIDETECH® DROP HOSE 8800 SERIES

Tank truck delivery drop hose. Extra flexible, light weight, low drag resistance makes the hose easy to handle. Suitable for oil and petrol, aromatic content up to 50%.

DESCRIPTION

Tube	Nitrile compound, black, smooth
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, black, special polymer highly ozone resistant, aging and abrasion resistant, cover with low friction rate, conductive
Marking	White/black transfer tape TUDERTECHNICA GLIDETECH DROP HOSE

TUDERTECHNICA GLIDETECH® DROP HOSE

TECHNICAL CHARACTERISTICS

Temperature Range	-22°F/212°F (-30°C/+100°C)
Vacuum	14.8 inHg (0.5 bar)
Norm	ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter	Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8802-100	25	1	1.46	40	130	10	150	30	450	0,88	.59	25	1
8802-150	38	1.5	2.00	40	130	10	150	30	450	1,12	.75	38	1.5
8802-200	51	2	2.52	40	130	10	150	30	450	1,56	1.05	51	2
8802-250	63.5	2.5	3.09	40	130	10	150	30	450	2,18	1.46	63.5	2.5
8802-300	76	3	3.62	40	130	10	150	30	450	2,56	1.72	76	3
8802-400	102	4	4.65	40	130	9	135	27	405	3,32	2.22	102	4

Data refers to ambient temperature 68°F (20°C)
Custom colors and sizes available upon request.
Standard Color: Black

TUSIL BRIGHT 9000 SERIES

Suction and delivery hose suitable for cosmetic, pharmaceutical and food products. Phthalates free.

DESCRIPTION

Tube	Silicone platinum cured, translucent. Meets FDA CFR 21 PART 177.2600, BROCHURE 1227, BFR CHAP XV, European Reglement 1935/2004/CE Resolution AP 2004(5), DM 21/03/1973 e seguenti, JAPAN Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006, USP XXXII class VI requirements.
Reinforcement	High temperature resistant plies, stainless steel wire helix
Cover	Smooth, silicone platinum cured, white translucent, heat, weather, ozone and abrasion resistant, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA TUSIL BRIGHT

TECHNICAL CHARACTERISTICS

Temperature Range	-76°F/392°F (-60°C/+200°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
9000-050	13	.50	23	.81	15	225	45	675	0,32	.26	70	2.76
9000-075	19	.75	29	1.14	13	195	39	585	0,51	.34	80	3.15
9000-100	25	1	35	1.38	10	150	30	450	0,63	.42	100	3.94
9000-150	38	1.5	49	1.93	7	105	21	315	1,08	.73	150	5.91
9000-200	51	2	62	2.44	6	90	18	270	1,80	.94	240	9.41
9000-250	63.5	2.5	76	3.01	5	75	15	225	2,12	1.42	270	10.63
9000-300	76	3	89	3.50	4	60	12	180	2,49	1.67	360	14.17
9000-400	102	4	115	4.53	3	45	9	135	3,48	2.34	400	15.75

Data refers to ambient temperature (20°C/68°F); we recommend a reduction of 20% working pressure for every 100°C/212°F of temperature increase.
Custom colors and sizes available upon request.
Standard Color: White Translucent

TUSILPURE 9100 SERIES

Suction and delivery hose suitable for cosmetic, pharmaceutical and food products. Phthalates free.

DESCRIPTION

Tube	Silicone platinum cured, white. Meets FDA CFR 21 PART 177.2600, BROCHURE 1227, BFR CHAP XV, European Reglement 1935/2004/CE Resolution AP 2004(5), DM 21/03/1973 e seguenti, JAPAN Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006, USP XXXII class VI requirements.
Reinforcement	High temperature resistant plies, stainless steel wire helix
Cover	Smooth, silicone platinum cured, white, heat, weather, ozone and abrasion resistant, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA TUSILPURE

TECHNICAL CHARACTERISTICS

Temperature Range	-76°F/392°F (-60°C/+200°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
9109-050	13	.50	23	.91	15	225	45	675	0,39	.26	70	2.76
9109-075	19	.75	29	1.14	13	195	39	585	0,51	.34	80	3.15
9109-100	25	1	35	1.38	10	150	30	450	0,63	.42	100	3.94
9109-150	38	1.5	49	1.93	7	105	21	315	1,08	.73	150	5.91
9109-200	51	2	62	2.44	6	90	18	270	1,40	.94	240	9.41
9109-250	63.5	2.5	76	3.01	5	75	15	225	2,12	1.42	270	10.63
9109-300	76	3	89	3.50	4	60	12	180	2,49	1.67	360	14.17
9109-400	102	4	115	4.53	3	45	9	135	3,48	2.34	400	15.75

Data refers to ambient temperature (20°C/68°F); we recommend a reduction of 20% working pressure for every 100°C/212°F of temperature increase.

Custom colors and sizes available upon request.

Standard Color: White

SPIRAL TECH NITRILE 8371 SERIES

Light and flexible lorry collecting hose suitable for fatty and not fatty products. Phthalates free tube, tested in compliance with REACH regulation.

DESCRIPTION

Tube	Nitrile, white, phthalates free, tested in compliance with REACH regulation. Meets FDA 21 CFR 177.2600, BFR RECOMMENDATION XXI CAT 2, DM 21.03.73 e seguenti, European Reglement 1935/2004/CE, Japan-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006. Ral registration G-73.
Reinforcement	Synthetic plies
Cover	Corrugated, blue, abrasion, ageing, ozone and oil resistant, outer thermoplastic helix
Sterilization	According to 3A Sanitary Standard Class II

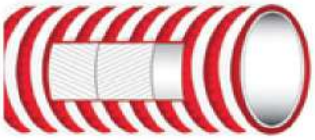
TECHNICAL CHARACTERISTICS

Temperature Range	-13°F/176°F (-25°C /+80°C)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Vacuum		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mmHg	inHg	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8371-200	51	2	-	675	26,6	10	150	30	450	1,62	1.09	100	3.94
8371-250	63.5	2.5	-	600	23,6	10	150	30	450	1,96	1.31	130	5.12
8371-300	76	3	-	600	23,6	10	150	30	450	2,37	1.59	150	5.91
8371-400	102	4	-	525	20,7	10	150	30	450	3,06	2.05	200	7.87
8371-600	152	6	-	300	11,8	5	75	15	225	4,46	2.99	300	11.81

Custom colors and sizes available upon request.
Standard Color: White

SPIRAL TECH BUTYL 8173 SERIES



Premium grade low permeation light and flexible lorry collecting hose suitable for a wide range of products. Recommended for wine and spirits. Phthalates free tube, tested in compliance with REACH regulation.

DESCRIPTION

Tube	IIR, white phthalates free, tested in compliance with REACH regulation. Meets FDA 21 CFR 177.2600, DM 21.03.73 e seguenti, European Reglement 1935/2004/CE, Japan-Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006
Reinforcement	Synthetic plies
Cover	Corrugated, red, abrasion, ageing, ozone and oil resistant, outer thermoplastic helix
Sterilization	According to 3A Sanitary Standard Class II

TECHNICAL CHARACTERISTICS

Temperature Range	-13°F/176°F (-25°C /+80°C)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Vacuum		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mmHg	inHg	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8173-150	38	1.5	-	675	26,6	10	150	30	450	1.23	.82	80	3.15
8173-200	51	2	-	675	26,6	10	150	30	450	1,79	1.20	100	3.94
8173-250	63.5	2.5	-	600	23,6	10	150	30	450	2,18	1.46	130	5.12
8173-300	76	3	-	600	23,6	10	150	30	450	2,56	1.72	150	5.91
8173-400	102	4	-	525	20,7	10	150	30	450	3,35	2.24	200	7.87

Custom colors and sizes available upon request.
Standard Color: Red

TUFLON SIL 9159 SERIES

Suction and delivery hose for foodstuff, pharmaceutical, cosmetic and chemicals, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium). Hose resistant to high temperatures, used as connection between pipes and fixed equipment. Phthalates free.

DESCRIPTION

Tube	PFA (perfluoroalkoxy), white, phthalates free, tested in according to REACH standards. PFA is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.1550, 177.2600, USP XXXII class VI, ISO 10993 Sections 5, 10, 11:2009 and JAPAN Ministry of Health and Welfare Notice No. 370, 1959 and No. 201, 2006
Reinforcement	Synthetic plies, stainless steel wire helices, on request static wires to discharge static electricity
Cover	Smooth, white, silicone rubber. Heat, abrasion, ageing, and ozone resistant, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Transfer tape TUDERTECHNICA TUFLON SIL

TUDERTECHNICA TUFLON SIL

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C/+150°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
9159-050	13	.50	24	.94	10	150	40	600	0,47	.31	45	1.77
9159-075	19	.75	30	1.18	10	150	40	600	0,61	.41	70	2.76
9159-100	25	1	36	1.42	10	150	40	600	0,76	.51	90	3.54
9159-125	32	1.25	43	1.69	8	120	32	480	0,93	.62	120	4.72
9159-150	38	1.5	50	1.97	7	105	28	420	1,26	.84	140	5.51
9159-200	51	2	62	2.44	7	105	28	420	1,60	1.07	180	7.09
9159-250	63.5	2.50	79.5	3.13	6	90	24	360	2,69	1.80	320	12.60
9159-300	76	3	91	3.58	5	75	20	300	3,24	2.17	380	14.96
9159-400	102	4	117	4.61	4	60	16	240	5,06	3.39	580	22.84

Data refers to ambient temperature (20°C/68°F) and static conditions; we recommend a reduction of 20% working pressure for every 100°C/212°F of temperature increase. Other diameters, wall thickness and pressure only on specific request.
Custom colors and sizes available upon request.
Standard Color: White

TUFLON PTFE SIL-NB 9159 SERIES

Suction and delivery hose for foodstuff, pharmaceutical, cosmetic and chemicals, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium), where a flexible connection is required. Hose resistant to high temperatures. Phthalates free.

DESCRIPTION

Tube	PTFE (polytetrafluorethylene) black, antistatic, phthalates free, tested in compliance with REACH regulation. PTFE is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.1550 standards, USP XXXII class VI, ISO 10993 Sections 5,10,11:2009
Reinforcement	Synthetic plies, stainless steel wire helices, on request static wires to discharge static electricity
Cover	Smooth, white, silicone rubber. Meets FDA CFR 21 PART 177.2600. Heat abrasion, ageing and ozone resistant, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Transfer tape TUDERTECHNICA TUFLON SIL

TUDERTECHNICA TUFLON SIL

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C/+150°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
9159B-050	13	.50	24	.94	10	150	40	600	0,47	.31	45	1.77
9159B-075	19	.75	30	1.18	10	150	40	600	0,61	.41	70	2.76
9159B-100	25	1	36	1.42	10	150	40	600	0,76	.51	90	3.54
9159B-125	32	1.25	43	1.69	8	120	32	480	0,93	.62	120	4.72
9159B-150	38	1.5	50	1.97	7	105	28	420	1,26	.84	140	5.51
9159B-200	51	2	62	2.44	7	105	28	420	1,60	1.07	180	7.09
9159B-250	63.5	2.50	79.5	3.13	6	90	24	360	2,69	1.80	320	12.60
9159B-300	76	3	91	3.58	5	75	20	300	3,24	2.17	380	14.96
9159B-400	102	4	117	4.61	4	60	16	240	5,06	3.39	580	22.84

Data refers to ambient temperature (20°C/68°F) and static conditions; we recommend a reduction of 20% working pressure for every 100°C/212°F of temperature increase. Other diameters, wall thickness and pressure only on specific request.
Custom colors and sizes available upon request.
Standard Color: White

Cosmetic & Pharmaceutical

The beauty of TUDERTECHNICA Cosmetic & Pharmaceutical hoses is more than skin deep.

Built from the core out on a proprietary rigid mandrel frame, TUDERTECHNICA hoses for the Cosmetic & Pharmaceutical industries incorporate liners, plies, and covers chosen specifically for each individual application. Liners are available in IIR, MFA, UHMW, FEP, PFA; plus the Platinum-Cured Silicone liner in our TUSIL series of hoses. Select hoses are designed for applications where static electricity can build up, helping avoid potentially dangerous uncontrolled discharges.

Here are just a few benefits designed into TUDERTECHNICA Cosmetic & Pharmaceutical hoses:

- Ozone Resistant Cover (abrasion resistant in many cases) lasts longer
- Flexible hoses allow for easier routing
- Choice of liners specific to applications

TUDERTECHNICA has been making high-quality industrial hose since 1983 and is the choice of many cosmetic and pharmaceutical makers worldwide.

TUDERTECHNICA hose is available in the NAFTA

GLIDETECH PTFE BIOTECH CHEM 8767 SERIES

Suction and delivery hose for chemicals and solvents, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium). Hose resistant to high temperatures, used as connection between pipes and fixed equipment. Designed for the chemical industry, food stuff, pharmaceutical and cosmetic industry, where a flexible connection is required. The hose is produced with high quality elastomers, with excellent chemical and mechanical properties. Phthalates free tube, tested in compliance with REACH regulation.

DESCRIPTION

Tube	PTFE (Polytetrafluorethylene) black, conductive, phthalates free, tested in compliance with REACH regulation. PTFE is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.1550 standards.
Reinforcement	Synthetic plies, galvanized wire helices, antistatic wires to discharge static electricity
Cover	Smooth, white with conductive chips, low friction material, non-marking when dragged on the floor, oil, chemical, abrasion, aging and ozone resistant, easy to clean, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Red/white/blue transfer tape TUDERTECHNICA TUFLON PTFE BIOTECH FDA FULL CONDUCTIVE MADE IN ITALY

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C/+150°C)
Vacuum	26.6 inHg (0.9 bar)
Electrical Properities	Type Ω/T according to EN 12115 ($R<10^5$ Ω, $R<10^9$ Ω through the hose wall)
Norm	EN12115, 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter		Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8767-050	13	.50	25	.98	40	130	16	235	64	940	0,55	1.21	100	3.94
8767-075	19	.75	31	1.22	40	130	16	235	64	940	0,72	1.59	130	5.12
8767-100	25	1.0	37	1.45	40	130	16	235	64	940	0,89	1.96	180	7.09
8767-125	32	1.25	44	1.73	40	130	16	235	64	940	1,08	2.38	220	8.66
8767-150	38	1.50	51	2.00	40	130	16	235	64	940	1,36	3.00	260	10.24
8767-200	51	2.0	66	2.60	40	130	16	235	64	940	2,48	5.47	330	12.99
8767-250	63.5	2.5	79.5	3.13	20	65	16	235	64	940	3,47	7.65	440	17.32
8767-300	76	3.0	91	3.58	20	65	16	235	64	940	3,98	8.77	520	20.47

Data refers to ambient temperature (20°C/68°F); we recommend a reduction of 20% working pressure for every 100°C/212°F of temperature increase.

Custom colors and sizes available upon request. Standard Color: White with Conductive Chips

GLIDETECH® UHMW FULL CONDUCTIVE CHEM 8730 SERIES

Suction and delivery hose for chemical products. Phthalates-free tube, tested in compliance with REACH regulation.

DESCRIPTION

Tube	UHMW, black, conductive, phthalate free, tested in compliance with REACH regulation, meets FDA 21 cfr 177.1520, BfR CHAP III and DM 21.03.73 e seguenti
Reinforcement	Synthetic plies, a/s copper wire to discharge static electricity, galvanized wire helices
Cover	Wide corrugated, black, conductive, low friction material, non-marking when dragged on the floor, abrasion, ozone, ageing, oil and chemical resistant, easy to clean, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA GLIDETECH UHMW FULL CONDUCTIVE MADE IN ITALY TUDERTECHNICA GLIDETECH UHMW Embossed stripe according to the Norm EN 12115 TUDERTECHNICA UHMWPE EN12115:2011 DN SD PN 10 BAR W/T Q/Y

TECHNICAL CHARACTERISTICS

Temperature Range	-22°F/212°F (-30°C/+100°C)
Vacuum	26.6 inHg (0.9 bar)
Electrical Properties	Type Ω/T according to norm EN 12115 ($R<10^6$ Ω, $R<10^9$ Ω through the hose wall)
Norm	3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter	Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8732-100	25	1	1.46	40	130	10	150	40	580	0,75	.50	100	3.94
8732-150	38	1.5	2.00	40	130	10	150	40	580	1,16	.78	150	5.91
8732-200	51	2	2.64	40	130	10	150	40	580	1,96	1.32	200	7.87
8732-300	76	3	3.62	40	130	10	150	40	580	2,79	1.87	350	13.78
8732-400	102	4	4.64	40	130	10	150	40	580	4,11	2.76	500	19.69

Data refer to ambient temperature (20°C/68°F). Some hoses not available in 130' standard length.
Custom colors and sizes available upon request.
Standard Color: Black

GLIDETECH® FEP CHEM 8740 SERIES

Suction and delivery hose for chemicals and solvents, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium). Hose resistant to high temperatures, used as connection between pipes and fixed equipment. Designed for the chemical industry, foodstuff, pharmaceutical and cosmetic industry, where a flexible connection is required. The hose is produced with high quality elastomers, with excellent chemical and mechanical properties. Phthalates free.

DESCRIPTION

Tube	FEP (Fluorinated Ethylene Propylene) white, minimum thickness 0,6 mm. FEP is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.1550, 177.2600 standards, USP XXIII class VI requirements and European Pharmacopoeia 3.1.9, ISO 10993 Sections 5,6,10,11
Reinforcement	Synthetic plies, steel wire helices, a/s copper wires to discharge static electricity
Cover	Wide corrugated, black, conductive, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Red/white/blue transfer tape TUDERTECHNICA GLIDETECH FEP 10 BAR (150 PSI) WP MADE IN ITALY

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C /+150°C) The operating temperature of the hose is directly dependent upon the specific fluid being conveyed and the length of time the fluid is in contact with the hose
Vacuum	26.6 inHg (0.9 bar)
Electrical Properties	Type M according to EN 12115 ($R<10^2\ \Omega$)
Norm	ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter	Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8742-100	25	1	1.46	40	130	10	150	40	580	0,80	.54	130	5.12
8742-150	38	1.5	2.01	40	130	10	150	40	580	1,20	.81	190	7.48
8742-200	51	2	2.60	40	130	10	150	40	580	2,03	1.36	250	9.80
8742-300	76	3	3.58	20	65*	10	150	40	580	3,08	2.07	380	14.96

Data refers to ambient temperature 68°F (20°C)
Custom colors and sizes available upon request.
Standard Color: Black
*Some hoses not available in 130' standard length.

GLIDETECH® PFA CHEM 8750 SERIES

Suction and delivery hose for chemicals and solvents, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium). Hose resistant to high temperatures, used as connection between pipes and fixed equipment. Designed for the chemical industry, foodstuff, pharmaceutical and cosmetic industry, where a flexible connection is required. The hose is produced with high quality elastomers, with excellent chemical and mechanical properties. Phthalates free.

DESCRIPTION

Tube	PFA (perfluoroalkoxy) white, minimum thickness 0,6 mm. PFA is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.2600 standards, USP XXIII class VI requirements and European Pharmacopoeia 3.1.9, ISO 109933 Sections 5,6,10,11
Reinforcement	Synthetic plies, steel wire helices, a/s copper wires to discharge static electricity
Cover	Wide corrugated, black, conductive, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Red/white/blue transfer tape TUDERTECHNICA GLIDETECH PFA 10 BAR (150 PSI) WP MADE IN ITALY

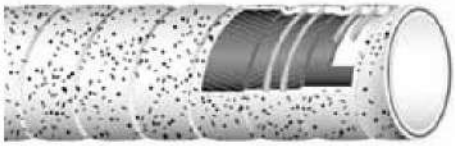
TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C /+150°C) The operating temperature of the hose is directly dependent upon the specific fluid being conveyed and the length of time the fluid is in contact with the hose
Vacuum	26.6 inHg (0.9 bar)
Electrical Properties	Type M according to EN 12115 ($R<10^2\ \Omega$)
Norm	ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter	Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8752-100	25	1	1.46	40	130	10	150	40	580	0,80	.54	130	5.12
8752-150	38	1.5	2.01	40	130	10	150	40	580	1,20	.81	190	7.48
8752-200	51	2	2.60	40	130	10	150	40	580	2,03	1.36	250	9.80
8752-300	76	3	3.58	20	65*	10	150	40	580	3,08	2.07	380	14.96

Data refers to ambient temperature 68°F (20°C). Some hoses not available in 130' standard length.
Custom colors and sizes available upon request.
Standard Color: Black
*Some hoses not available in 130' standard length.

GLIDETECH® FEP CHIPS 8747 SERIES



Suction and delivery hose for chemicals and solvents, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium). Hose resistant to high temperatures, Used as connection between pipes and fixed equipment. Designed for the chemical industry, foodstuff, pharmaceutical and cosmetic industry, where a flexible connection is required. The hose is produced with high quality elastomers, with excellent chemical and mechanical properties. Phthalate free.

DESCRIPTION

Tube	FEP (Fluorinated Ethylene Propylene) white, minimum thickness 0,6 mm. FEP is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.1550, 177.2600 standards, USP XXIII class VI requirements and European Pharmacopoeia 3.1.9, ISO 10993 Sections 5,6,10,11
Reinforcement	Synthetic plies, steel wire helices, a/s copper wires to discharge static electricity
Cover	Wide corrugated, white with conductive chips, low friction material, non-marking when dragged on the floor, oil, chemical and abrasion resistant, easy to clean, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Red/white/blue transfer tape TUDERTECHNICA GLIDETECH FEP 10 BAR (150 PSI) WP MADE IN ITALY

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C /+150°C) The operating temperature of the hose is directly dependent upon the specific fluid being conveyed and the length of time the fluid is in contact with the hose
Vacuum	26.6 inHg (0.9 bar)
Electrical Properties	Type M according to EN 12115 ($R<10^2\ \Omega$)
Norm	ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter	Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8747-100	25	1	1.46	40	130	10	150	40	580	0,80	.54	130	5.12
8747-150	38	1.5	2.01	40	130	10	150	40	580	1,20	.81	190	7.48
8747-200	51	2	2.60	40	130	10	150	40	580	2,03	1.36	250	9.80
8747-300	76	3	3.58	20	65*	10	150	40	580	3,08	2.07	380	14.96

Data refers to ambient temperature 68°F (20°C)
Custom colors and sizes available upon request.
Standard Color: White with Black Chips
*Some hoses not available in 130' standard length.

TUSIL BRIGHT 9000 SERIES

Suction and delivery hose suitable for cosmetic, pharmaceutical and food products. Phthalates free.

DESCRIPTION

Tube	Silicone platinum cured, translucent. Meets FDA CFR 21 PART 177.2600, BROCHURE 1227, BFR CHAP XV, European Reglement 1935/2004/ CE Resolution AP 2004(5), DM 21/03/1973 e seguenti, JAPAN Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006, USP XXXII class VI requirements.
Reinforcement	High temperature resistant plies, stainless steel wire helix
Cover	Smooth, silicone platinum cured, white translucent, heat, weather, ozone and abrasion resistant, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA TUSIL BRIGHT

TECHNICAL CHARACTERISTICS

Temperature Range	-76°F/392°F (-60°C/+200°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
9000-050	13	.50	23	.91	15	225	45	675	0,39	.26	70	2.76
9000-075	19	.75	29	1.14	13	195	39	585	0,51	.34	80	3.15
9000-100	25	1	35	1.38	10	150	30	450	0,63	.42	100	3.94
9000-150	38	1.5	49	1.93	7	105	21	315	1,08	.73	150	5.91
9000-200	51	2	62	2.44	6	90	18	270	1,40	.94	240	9.41
9000-250	63.5	2.5	76	3.01	5	75	15	225	2,12	1.42	270	10.63
9000-300	76	3	89	3.50	4	60	12	180	2,49	1.67	360	14.17
9000-400	102	4	115	4.53	3	45	9	135	3,48	2.34	400	15.75

Data refers to ambient temperature (20°C/68°F); we recommend a reduction of 20% working pressure for every 100°C/212°F of temperature increase.

Custom colors and sizes available upon request.

Standard Color: White Translucent

TUSILPURE 9100 SERIES

Suction and delivery hose suitable for cosmetic, pharmaceutical and food products. Phthalates free.

DESCRIPTION

Tube	Silicone platinum cured, white. Meets FDA CFR 21 PART 177.2600, BROCHURE 1227, BFR CHAP XV, European Reglement 1935/2004/CE Resolution AP 2004(5), DM 21/03/1973 e seguenti, JAPAN Ministry of Health and Welfare Notice No.370,1959 and No.201, 2006, USP XXXII class VI requirements.
Reinforcement	High temperature resistant plies, stainless steel wire helix
Cover	Smooth, silicone platinum cured, white, heat, weather, ozone and abrasion resistant, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	TUDERTECHNICA TUSILPURE

TECHNICAL CHARACTERISTICS

Temperature Range	-76°F/392°F (-60°C/+200°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
9109-050	13	.50	23	.91	15	225	45	675	0,39	.26	70	2.76
9109-075	19	.75	29	1.14	13	195	39	585	0,51	.34	80	3.15
9109-100	25	1	35	1.38	10	150	30	450	0,63	.42	100	3.94
9109-150	38	1.5	49	1.93	7	105	21	315	1,08	.73	150	5.91
9109-200	51	2	62	2.44	6	90	18	270	1,40	.94	240	9.41
9109-250	63.5	2.5	76	3.01	5	75	15	225	2,12	1.42	270	10.63
9109-300	76	3	89	3.50	4	60	12	180	2,49	1.67	360	14.17
9109-400	102	4	115	4.53	3	45	9	135	3,48	2.34	400	15.75

Data refers to ambient temperature (20°C/68°F); we recommend a reduction of 20% working pressure for every 100°C/212°F of temperature increase.

Custom colors and sizes available upon request.

Standard Color: White

TUFLON SIL 9159 SERIES

Suction and delivery hose for foodstuff, pharmaceutical, cosmetic and chemicals, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium). Hose resistant to high temperatures, used as connection between pipes and fixed equipments. Phthalates free.

DESCRIPTION

Tube	PFA (perfluoroalkoxy), white, phthalates free, tested in according to REACH standards. PFA is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.1550, 177.2600, USP XXXII class VI, ISO 10993 Sections 5, 10, 11:2009 and JAPAN Ministry of Health and Welfare Notice No. 370, 1959 and No. 201, 2006
Reinforcement	Synthetic plies, stainless steel wire helices, on request static wires to discharge static electricity
Cover	Smooth, white, silicone rubber. Heat, abrasion, ageing, and ozone resistant, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Transfer tape TUDERTECHNICA TUFLON SIL

TUDERTECHNICA TUFLON SIL

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C/+150°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
9159-050	13	.50	24	.94	10	150	40	600	0,47	.31	45	1.77
9159-075	19	.75	30	1.18	10	150	40	600	0,61	.41	70	2.76
9159-100	25	1	36	1.42	10	150	40	600	0,76	.51	90	3.54
9159-125	32	1.25	43	1.69	8	120	32	480	0,93	.62	120	4.72
9159-150	38	1.5	50	1.97	7	105	28	420	1,26	.84	140	5.51
9159-200	51	2	62	2.44	7	105	28	420	1,60	1.07	180	7.09
9159-250	63.5	2.50	79.5	3.13	6	90	24	360	2,69	1.80	320	12.60
9159-300	76	3	91	3.58	5	75	20	300	3,24	2.17	380	14.96
9159-400	102	4	117	4.61	4	60	16	240	5,06	3.39	580	22.84

Data refers to ambient temperature (20°C/68°F) and static conditions; we recommend a reduction of 20% working pressure for every 100°C/212°F of temperature increase. Other diameters, wall thickness and pressure only on specific request.
Custom colors and sizes available upon request.
Standard Color: White

TUFLON PTFE SIL-NB 9159 SERIES

Suction and delivery hose for foodstuff, pharmaceutical, cosmetic and chemicals, except for chlorine trifluoride, chlorine and fluorine gas, oxygen difluoride, phosgene and molten alkalis (for ex. sodium), where a flexible connection is required. Hose resistant to high temperatures. Phthalates free.

DESCRIPTION

Tube	PTFE (polytetrafluorethylene) black, antistatic, phthalates free, tested in compliance with REACH regulation. PTFE is a polymer with excellent resistance to high temperature, mechanical stress and to oxidation. It complies with FDA 21 CFR 177.1550 standards, USP XXXII class VI, ISO 10993 Sections 5,10,11:2009
Reinforcement	Synthetic plies, stainless steel wire helices, on request static wires to discharge static electricity
Cover	Smooth, white, silicone rubber. Meets FDA CFR 21 PART 177.2600. Heat abrasion, ageing and ozone resistant, glossy cover
Sterilization	According to 3A Sanitary Standard Class II
Marking	Transfer tape TUDERTECHNICA TUFLON SIL

TUDERTECHNICA™ TUFLON SIL

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/302°F (-40°C/+150°C)
Vacuum	26.6 inHg (0.9 bar)
Norm	ISO 1307 for dimensional tolerances 3A Sanitary Standard Class II

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
9159B-050	13	.50	24	.94	10	150	40	600	0,47	.31	45	1.77
9159B-075	19	.75	30	1.18	10	150	40	600	0,61	.41	70	2.76
9159B-100	25	1	36	1.42	10	150	40	600	0,76	.51	90	3.54
9159B-125	32	1.25	43	1.69	8	120	32	480	0,93	.62	120	4.72
9159B-150	38	1.5	50	1.97	7	105	28	420	1,26	.84	140	5.51
9159B-200	51	2	62	2.44	7	105	28	420	1,60	1.07	180	7.09
9159B-250	63.5	2.50	79.5	3.13	6	90	24	360	2,69	1.80	320	12.60
9159B-300	76	3	91	3.58	5	75	20	300	3,24	2.17	380	14.96
9159B-400	102	4	117	4.61	4	60	16	240	5,06	3.39	580	22.84

Data refers to ambient temperature (20°C/68°F) and static conditions; we recommend a reduction of 20% working pressure for every 100°C/212°F of temperature increase. Other diameters, wall thickness and pressure only on specific request.
Custom colors and sizes available upon request.
Standard Color: White

Wind Energy • Petroleum • Silicone Hose

Specialty

TUDERTECHNICA Specialty hoses help keep engines, gearboxes, and even production lines running.

Built from the core out on a proprietary rigid mandrel frame, TUDERTECHNICA hoses incorporate liners, plies, and covers chosen specifically for each individual application. Liners are available in NBR and Silicone. Other liners are available upon request.

Here are just a few benefits designed into TUDERTECHNICA Industrial hoses:

- Abrasion resistant covers
- Integrated static discharge elements in selected hoses
- Choice of liners specific to applications

TUDERTECHNICA has been making high-quality industrial hose since 1983 and is the choice of many industrial companies worldwide.

TUDERTECHNICA hose is available in the NAFTA

WIND/5-15 8900 SERIES

Light and flexible hose, easy to handle, used for suction and delivery of hydraulic oil in wind turbine gearboxes.

DESCRIPTION

Tube	Nitrile, black, smooth
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, black, special polymer highly ozone resistant, ageing and abrasion resistant, cover with low friction rate
Marking	White/black transfer tape TUDERTECHNICA WIND/5

TECHNICAL CHARACTERISTICS

Temperature Range	-40°F/248°F (-40°C / +120°C)
Vacuum	23.6 inHg (0.8 bar)
Norm	ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter	Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8902-150	38	1.5	2.00	5	75	15	225	1,10	.75	70	2.75
8902-200	51	2	2.52	5	75	15	225	1,51	1.01	90	3.54
8902-250	63.5	2.5	3.09	5	75	15	225	1,83	1.24	100	3.94

Custom colors and sizes available upon request.
Standard Color: Black

SILRAD/L 8980 SERIES

Flexible hose used for suction and delivery of antifreeze liquid in the wind turbine cooling system.

DESCRIPTION

Tube	Smooth, blue silicone rubber, heat and antifreeze liquid resistant
Reinforcement	High temperature resistant plies, spiral wire
Cover	Smooth, blue silicone rubber, heat, weather, ozone, paraffin oil and abrasion resistant, cloth finish
Marking	White/black transfer tape TUDERTECHNICA SILRAD/L

TECHNICAL CHARACTERISTICS

Temperature Range	-76°F/392°F (-60°C/+200°C)
Vacuum	23.6 inHg (0.8 bar)
Norm	SAE J20R2 CLASS A, ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8981-050	13	.50	23	.91	15	225	45	675	0,38	.25	60	2.36
8981-075	19	.75	29	1.14	13	195	39	585	0,49	.33	80	3.15
8981-100	25	1	35	1.37	10	150	30	450	0,62	.42	110	4.33
8981-125	32	1.25	42	1.62	8	120	24	360	0,75	.50	130	5.12
8981-150	38	1.5	48.5	1.91	7	105	21	315	0,94	.63	150	5.91
8981-200	51	2	61.5	2.42	6	90	18	270	1,25	.84	200	7.87
8981-250	63.5	2.5	75.5	2.97	5	75	15	225	1,89	1.27	270	10.63
8981-300	76	3	88	3.47	4	60	12	180	2,22	1.49	350	13.78
8981-400	102	4	116	4.59	3	45	9	135	3,71	2.49	500	19.69

Data refers to ambient temperature (20°C/68°F)
Custom colors and sizes available upon request.
Standard Color: Blue

SILRAD/L 8986 SERIES

Flexible hose used for suction and delivery of antifreeze liquid in the wind turbine cooling system.

DESCRIPTION

Tube	Smooth, green silicone rubber, heat and antifreeze liquid resistant
Reinforcement	High temperature resistant plies, spiral wire
Cover	Smooth, green silicone rubber, heat, weather, ozone, paraffin oil and abrasion resistant, cloth finish
Marking	White/black transfer tape TUDERTECHNICA SILRAD/L

TECHNICAL CHARACTERISTICS

Temperature Range	-76°F/392°F (-60°C/+200°C)
Vacuum	23.6 inHg (0.8 bar)
Norm	SAE J20R2 CLASS A, ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8986-050	13	.50	23	.91	15	225	45	675	0,38	.25	60	2.36
8986-075	19	.75	29	1.14	13	195	39	585	0,49	.33	80	3.15
8986-100	25	1	35	1.37	10	150	30	450	0,62	.42	110	4.33
8986-125	32	1.25	42	1.62	8	120	24	360	0,75	.50	130	5.12
8986-150	38	1.5	42	1.91	7	105	21	315	0,94	.63	150	5.91
8986-200	51	2	48.5	2.42	6	90	18	270	1,25	.84	200	7.87
8986-250	63.5	2.5	61.5	2.97	5	75	15	225	1,89	1.27	270	10.63
8986-300	76	3	75.5	3.47	4	60	12	180	2,22	1.49	350	13.78
8986-400	102	4	116	4.59	3	45	9	135	3,71	2.49	500	19.69

Data refers to ambient temperature (20°C/68°F)
Custom colors and sizes available upon request.
Standard Color: Green

TUSIL RADFLEX 9200 SERIES

Tight bend connection between radiator and engine. Can be used to replace pre-formed elbows due to the highly flexible structure. Temperature range -76°F/392°F (-60°C / +200°C).

DESCRIPTION

Tube	Silicone, green, heat and anti freeze liquid resistant
Reinforcement	High temperature resistant plies, spiral wire
Cover	Square corrugated, silicone, blue, heat, weather, ozone and abrasion resistant, cloth finish
Marking	TUDERTECHNICA TUSIL RADFLEX

TECHNICAL CHARACTERISTICS

Temperature Range	-76°F/392°F (-60°C/+200°C)
Vacuum	17.7 inHg (0.6 bar)
Norm	SAE J20R2 CLASS A

CRP Part #	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	mm	in	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
9206-063	16	.625	26	1.02	5	75	15	225	0,37	.25	35	1.38
9206-075	19	.75	29	1.14	5	75	15	225	0,42	.28	45	1.77
9206-100	25	1	35	1.38	5	75	15	225	0,53	.36	50	1.97
9206-125	32	1.25	43	1.69	5	75	15	225	0,70	.47	80	3.15
9206-150	38	1.5	49	1.93	5	75	15	225	0,81	.54	100	3.94
9206-200	51	2	63	2.48	5	75	15	225	1,33	.89	150	5.91
9206-250	63.5	2.5	76.5	3.01	5	75	15	225	1,79	1.20	220	8.66
9206-300	76	3	90	3.54	5	75	15	225	2,35	1.58	270	10.63
9206-400	102	4	118	4.65	5	75	15	225	3,50	2.35	400	15.75

Data refers to ambient temperature (20°C/68°F), we recommend a reduction of 20% working pressure for every 100°C of temperature increase.

Custom colors and sizes available upon request.

Standard Color: Green

GLIDETECH® DROP HOSE 8800 SERIES

APPLICATION: Tank truck delivery drop hose.
Extra flexible, light weight, low drag resistance makes the hose easy to handle. Suitable for oil and petrol, aromatic content up to 50%.

DESCRIPTION

Tube	Nitrile compound, black, smooth
Reinforcement	Synthetic plies, steel wire helices
Cover	Wide corrugated, black, special polymer highly ozone resistant, ageing and abrasion resistant, cover with low friction rate, conductive
Marking	White/black transfer tape TUDERTECHNICA GLIDETECH DROP HOSE

TUDERTECHNICA GLIDETECH® DROP HOSE

TECHNICAL CHARACTERISTICS

Temperature Range	-22°F/212°F (-30°C/+100°C)
Vacuum	14.8 inHg (0.5 bar)
Norm	ISO 1307 for dimensional tolerances

CRP Part #	Inside Diameter		Outside Diameter	Length		Working Pressure		Burst Pressure		Appr. Weight		Bending Radius	
	mm	in	in	mt	ft	bar	psi	bar	psi	kg/mt	lbs/ft	mm	in
8802-100	25	1	1.46	40	130	10	150	30	450	0,88	.59	25	1
8802-150	38	1.5	2.00	40	130	10	150	30	450	1,12	.75	38	1.5
8802-200	51	2	2.52	40	130	10	150	30	450	1,56	1.05	51	2
8802-250	63.5	2.5	3.09	40	130	10	150	30	450	2,18	1.46	63.5	2.5
8802-300	76	3	3.62	40	130	10	150	30	450	2,56	1.72	76	3
8802-400	102	4	4.65	40	130	9	135	27	405	3,32	2.22	102	4

Data refers to ambient temperature 68°F (20°C)
Custom colors and sizes available upon request.
Standard Color: Black

COUPLING CAPABILITIES

Internally expanded and crimped,
other fittings available upon request

NPT NATIONAL PIPE THREAD

FEMALE BEVEL SEAT

X2 Metric DIN

TRI-CLAMP

HOSE SLEEVE

CAMLOCK

Other couplings and fittings available upon request

Chemical Compatibility Chart

CHEMICAL RESISTANCE RATING

A	Good Resistance	Usually suitable for service.
B	Fair Resistance	Chemical has some deteriorative effects, but the elastomer is still adequate for moderate service.
C	Depends On Conditions	Moderate service may be possible if chemical exposure is limited or infrequent.
D	Not Recommended	Unsuitable for service.

The chemical resistance chart is offered as a guide only. The data has been complied from generally available sources, primarily the RMA Hose Handbook, IP-2, 2003. The compatibility of each chemical listed is based on application temperatures of 70° F (212° C) unless noted. Chemical concentrations vary; please consult CRP Industries regarding specific applications and proper hose usage.

CHEMICAL RESISTANCE RATING

A = Good Resistance | **B** = Fair Resistance | **C** = Depends On Conditions | **D** = Not Recommended

	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Acetal	C	B	D	C	B	D	-	A	A
Acetaldehyde	D	A	D	C	A	D	B	A	A
Acetamide	C	A	A	B	A	B	-	A	A
Acetate Solvents	C	C	D	D	A	D	-	A	A
Acetic Acid, 10%	B	B	B	C	A	C	-	A	A
Acetic Acid, 30%	D	B	D	C	A	C	-	A	A
Acetic Acid, 50%	D	B	D	C	A	D	-	A	A
Acetic Acid, Glacial	D	B	D	D	A	D	-	A	A
Acetic Anhydride	D	B	D	D	B	D	D	A	A
Acetic Ester (Ethyl Acetate)	D	B	D	D	A	D	-	A	A
Acetic Ether (Ethyl Acetate)	D	B	D	D	A	D	-	A	A
Acetic Oxide (Acetic Anhydride)	D	B	D	D	B	D	-	A	A
Acetone	C	B	D	C	A	D	D	A	A
Acetophenome	C	A	D	D	A	D	-	A	A
Acetyl Acetone	D	B	C	D	B	D	-	A	A
Acetyl Chloride	D	C	D	D	C	B	C	B	A
Acetylene	D	A	A	B	B	A	-	A	A
Acrylonitrile	C	D	D	C	D	D	-	A	A
Air	A	A	A	A	A	A	A	A	A
Alcohol Aliphatic	A	A	A	A	A	C	-	A	B
Alcohol, Aromatic	C	D	C	C	D	A	-	A	A
Alk-Tri (Trichloroethylene)	D	D	D	D	D	A	-	B	A
Allyl Alcohol	A	A	A	A	A	B	-	A	A
Allyl Bromide	D	D	D	D	D	B	-	B	A
Allyl Chloride	D	D	D	D	D	A	-	B	A
Alum (Alum Potassium Sulfate)	A	A	A	A	A	A	-	A	A
Aluminum Acetate	C	A	C	C	A	A	-	A	A
Aluminum Chloride	A	A	A	A	A	A	B	A	A
Aluminum Fluoride	A	A	A	A	A	A	-	A	A
Aluminum Hydroxide	A	A	A	A	A	A	-	A	A
Aluminum Phosphate	A	A	A	A	A	A	-	A	A
Aluminum Nitrate	A	A	A	A	A	A	-	A	A
Aluminum Sulfate	A	A	A	A	A	A	A	A	A
Ammonia, Liquid	B	A	B	A	A	A	-	A	A
Ammonia in Water	B	B	C	B	A	B	-	A	A
Ammonium Carbonate	A	A	C	A	A	A	C	A	A
Ammonium Chloride	A	A	A	A	A	A	C	A	A
Ammonium Hydroxide	B	A	B	B	A	B	A	A	A
Ammonium Metaphosphate	A	A	A	A	A	A	-	A	A
Ammonium Nitrate	A	A	A	A	A	A	C	A	A
Ammonium Persulfate	A	A	D	A	B	A	A	A	A
Ammonium Physphate	A	A	A	A	A	A	-	A	A
Ammonium Sulfate	A	A	A	A	A	A	A	A	A
Ammonium Sulfide	A	A	A	A	A	A	-	A	A
Ammonium Sulfite	A	A	A	A	A	A	-	A	A
Ammonium Thiocyanate	A	A	A	A	A	A	-	A	A
Ammonium Thiosulfate	A	A	A	A	A	A	-	A	A
Amyl Acetate	C	B	D	D	A	A	D	A	A
Amyl Acetone	D	B	D	D	B	D	-	A	A
Amyl Alcohol	A	A	A	A	A	A	D	A	A
Amyl Borate	D	D	A	A	D	A	-	A	A
Amyl Chloride	D	D	D	D	D	A	D	A	A
Amyl Chloronapthalene	D	D	D	D	D	A	-	A	A
Amyl Napthalene	D	D	D	D	D	A	-	A	A
Amyl Oleate	D	B	D	D	B	C	-	A	A
Amyl Phenol	D	D	D	D	D	A	-	A	A
Anethole	D	D	D	D	D	B	-	B	A

	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Aniline	D	B	D	C	D	B	B	A	B
Aniline Dyes	B	B	D	B	B	B	-	A	A
Aniline Hydrochloride	B	B	B	D	B	B	-	A	A
Animal Fats	D	C	A	D	C	A	-	A	A
Animal Grease	D	D	A	C	C	A	-	A	A
Animal Oils	D	C	A	D	C	A	-	A	A
Ansul Ether	D	D	D	D	C	D	-	A	A
Antifreeze	A	A	A	A	A	A	-	A	A
Antimony Chloride	D	B	A	D	D	A	-	A	A
Antimony Pentachloride	D	D	B	D	D	A	-	B	A
Aqua Regia	D	C	D	D	B	A	-	B	A
Aromatic Hydrocarbons	D	D	D	D	D	A	-	-	A
Arquad	A	A	A	A	A	A	-	A	A
Arsenic Acid	B	A	A	B	A	A	-	A	A
Arsenic Chloride	D	D	C	A	D	D	-	D	A
Arsenic Trichloride	D	D	A	A	D	D	-	D	A
Asphalt	B	D	B	C	D	A	-	B	A
ASTM #1 Oil	D	D	A	A	D	A	-	A	A
ASTM #2 Oil	D	D	A	B	D	A	-	-	A
STM #3 Oil	D	D	A	C	D	A	-	-	A
Aviation Gasoline	D	D	A	D	D	A	-	-	A
Barium Carbonate	A	A	A	A	A	A	-	A	A
Barium Chloride	A	A	A	A	A	A	-	A	A
Barium Hydroxide	A	A	A	A	A	A	-	A	A
Barium Sulfate	A	A	A	A	A	A	-	A	A
Barium Sulfide	A	A	A	A	A	A	-	A	A
Beer	A	A	A	B	A	A	-	A	A
Beet Sugar Liquors	A	A	A	B	A	A	-	A	A
Benzaldehyde	D	B	D	D	A	D	-	A	A
Benzene (Benzol)	D	D	D	D	D	A	-	-	A
Benzene Sulphonic Acid	D	D	D	B	D	A	D	A	A
Benzine Solvent (Ligroin)	D	D	A	D	D	A	-	-	A
Benzoic Acid	D	D	D	B	D	A	-	A	A
Benzoic Aldehyde	D	B	D	D	A	D	-	A	A
Benzotrichloride	-	-	-	-	-	-	-	-	A
Benzoyl Chloride	D	D	D	D	D	B	-	B	A
Benzyl Acetate	D	B	D	D	B	D	-	A	A
Benzyl Alcohol	D	B	D	D	B	A	-	-	A
Benzyl Chloride	D	D	D	D	D	A	-	-	A
Bichromate of Soda (Sodium Dichromate)	B	A	A	B	A	A	-	A	A
Black Sulfate Liquor	A	A	A	A	A	A	-	A	A
Blast Furnace Gas	C	C	C	A	C	A	-	A	A
Bleach Solutions	D	B	D	D	B	B	-	B	A
Borax	A	A	A	A	A	A	-	A	A
Bordeaux Mixture	B	A	A	A	A	A	-	A	A
Brandy	FDA TUBE REQUIRED								
Brine	A	A	A	A	A	A	-	A	A
Bromine	D	D	D	D	D	A	D	D	A
Bromine Water	D	C	C	B	C	A	-	A	A
Bromobenzene	D	D	D	D	D	B	-	C	A
Bunker Oil	D	D	A	B	D	A	-	A	A
Butanol	A	A	A	A	A	A	B	A	A
Butane	D	D	A	B	D	A	D	-	A
Butter	C	A	A	B	A	A	-	-	-
Butyl Acetate	C	B	D	D	A	D	D	-	A
Butyl Acrylate	D	D	D	D	D	D	-	B	A
Butylamine	B	C	C	D	C	D	-	A	A

CHEMICAL RESISTANCE RATING **A** = Good Resistance **B** = Fair Resistance **C** = Depends On Conditions **D** = Not Recommended

	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Butyl Benzene	D	D	D	D	D	A	-	A	-
Butyl Bromide	D	D	D	D	D	B	-	B	-
Butyl Butyrate	D	C	D	D	B	C	-	B	-
Butyl Carbitol	D	A	B	B	A	A	-	A	-
Butyl Cellosolve	D	A	B	B	A	D	-	A	-
Butyl Chloride	D	C	D	D	D	A	-	B	A
Butyl Ether	D	C	B	B	C	D	-	A	A
Butyl Ethyl Acetaldehyde	D	C	D	D	D	D	-	A	-
Butyl Ethyl Ether	D	C	D	D	C	C	-	A	A
Butyl Oleate	D	B	D	D	B	A	-	A	-
Butyl Phtalate	D	C	D	D	A	C	-	-	-
Butyl Stearate	D	C	B	D	C	A	-	A	A
Butyuraldehyde	C	D	D	D	D	D	-	A	A
Butyric Acid	C	C	C	C	C	C	D	A	A
Butyric Anhydride	C	C	C	D	C	C	-	A	A
Calcium Acetate	C	A	D	D	A	D	-	A	A
Calcium Bisulfate	C	B	A	A	B	A	-	A	A
Calcium Bisulfite	A	A	A	A	A	A	-	A	A
Calcium Carbonate	A	A	A	A	A	A	-	A	A
Calcium Chloride	A	A	A	A	A	A	-	A	A
Calcium Hydroxide	A	A	A	A	A	A	-	A	A
Calcium Hypochlorite	D	A	D	D	A	A	-	A	A
Calcium Nitrate	A	A	A	A	A	A	-	A	A
Calcium Oxide	-	-	-	-	-	-	A	-	-
Calcium Salts	-	-	-	-	-	-	B	-	-
Calcium Sulfate	A	A	A	A	A	A	-	A	A
Calcium Sulfide	A	A	A	A	A	A	-	A	A
Calcium Sulfite	A	A	A	A	A	A	-	A	A
Caliche Liquor	A	A	A	A	A	A	-	A	A
Cane Sugar Liquors	A	A	A	A	A	A	-	A	A
Carbitol	D	A	B	B	B	A	-	A	-
Carbitol Acetate	D	B	D	D	B	D	-	A	-
Carbolic Acid	C	C	C	C	A	A	-	A	A
Carbon Bisulfide	D	D	D	D	D	A	-	-	A
Carbon Dioxide	A	A	A	A	A	A	B	A	A
Carbon Disulfide	D	D	D	D	D	A	-	C	A
Carbonic Acid	A	A	A	A	A	A	-	A	A
Carbon Monoxide	C	C	C	C	C	A	-	A	A
Carbon Tetrachloride	D	D	C	D	D	A	D	-	A
Carbon Tetraflouride	D	D	C	D	D	-	-	C	A
Castor Oil	A	A	A	A	A	A	-	A	A
Caustic Potash	A	A	A	B	A	C	-	A	A
Caustic Soda	A	A	B	B	A	C	-	A	-
Cellosolve	B	A	D	D	A	C	-	A	A
Cellulose Acetate	C	B	D	C	B	D	-	B	A
Cellulube	C	B	D	D	A	C	-	A	-
China Wood Oil	D	A	A	B	A	C	-	A	A
Chlorine Dioxide	D	D	D	D	D	A	-	B	-
Chlorine Gas	D	D	D	D	D	A	-	-	A
Chlorine Water Solns	D	D	D	D	D	C	-	B	A
Chloroacetic Acid	D	D	C	C	A	D	-	A	A
Chloroacetone	D	B	D	D	D	D	-	A	-
Chlorobenzene	D	D	D	D	D	A	D	B	A
Chlorobutane	D	D	D	D	D	A	-	B	-
Chlorobutadiene	D	D	D	D	D	A	-	B	-
Chloroform	D	D	D	D	D	A	D	B	A
Chlorinated Hydrocarbons	D	D	D	D	D	A	-	-	A

	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Chloropentane	D	D	D	C	D	A	-	A	-
Chlorophenol	D	D	D	C	D	A	-	A	A
Chloropropanone	D	C	D	D	C	D	-	-	A
Chlorosulfonic Acid	D	D	C	C	D	D	D	D	-
Chlorothene	D	D	D	D	D	A	-	B	A
Chlorotoluene	D	D	D	D	D	A	-	-	A
Chromic Acid	D	C	D	D	C	C	D	C	A
Citric Acid	A	A	B	A	A	A	-	A	A
Coal Oil	D	D	A	B	D	A	-	A	-
Coal Tar	D	D	A	B	B	A	-	A	A
Coal Tar Naptha	D	D	C	C	D	A	-	-	A
Cobalt Chloride	A	A	A	A	A	A	-	A	-
Coconut Oil	D	B	A	B	A	A	-	A	A
Cod Liver Oil	D	A	A	B	A	A	-	A	A
Coke Oven Gas	C	C	C	C	D	D	-	D	A
Copper Arsenate	A	A	A	A	A	A	-	A	A
Copper Chloride	C	A	A	B	A	A	-	A	A
Copper Cyanide	A	A	A	A	A	A	-	A	A
Copper Nitrate	A	A	A	A	A	A	-	A	A
Copper Nitrite	A	A	A	A	A	A	-	A	A
Copper Sulfate	C	B	A	A	A	A	-	A	A
Copper Sulfide	C	A	A	A	A	A	-	A	A
Corn Oil	D	A	A	B	C	A	-	A	A
Cottonseed Oil	D	A	A	B	C	A	-	A	A
Creosote (Coal Tar)	D	D	A	B	D	B	-	-	A
Creosote (Wood)	D	D	A	B	D	A	-	A	A
Creosols	C	C	C	D	D	A	-	-	A
Cresylic Acid	D	D	C	C	D	A	-	A	A
Crude Oil	D	D	A	C	D	A	-	-	A
Cumene	D	D	C	C	D	A	-	A	A
Cupric Carbonate	C	A	B	B	A	A	-	A	A
Cupric Chloride	C	A	A	B	A	A	-	A	A
Cupric Nitrate	C	A	A	B	A	A	-	A	A
Cupric Nitrite	C	A	A	B	A	A	-	A	A
Cupric Sulfate	C	A	A	B	A	A	-	A	A
Cyclohexane	D	D	B	D	D	A	D	-	A
Cyclohexanone	D	D	D	D	D	C	D	-	A
Cyclohexanol	D	D	B	B	D	B	-	A	A
Cyclopentane	D	D	C	D	D	A	-	A	A
P-Cymene	D	D	C	D	D	A	-	A	A
DDT in Kerosene	D	D	A	B	D	A	-	A	A
Decaline	D	D	D	D	D	A	-	A	A
Decane	D	D	B	D	D	A	-	A	-
Detergent Solutions	B	A	A	B	A	A	-	A	A
Diacetone Alcohol	D	A	D	B	B	D	-	A	A
Dibenzyl Ether	D	B	D	D	D	C	-	A	A
Dibenzylsebacate	C	B	D	D	B	B	-	A	A
Dibromobenzene	D	D	D	D	D	A	-	B	A
Dibutylamine	D	D	D	D	D	D	C	D	A
Dibutyl Ether	D	D	D	D	B	C	-	A	A
Dibutyl Phthalate	D	B	D	D	A	D	-	A	A
Dibutyl Sebacate	D	B	D	D	B	B	-	B	A
Dicalcium Phosphate	A	A	A	A	A	A	-	A	A
Dichloroacetic Acid	D	C	D	D	C	C	-	A	A
P-Dichlorobenzene	D	D	D	D	D	A	-	D	A
Dichlorobutane	D	D	D	D	D	A	-	A	A
Dichloroisopropyl Ether	D	C	D	D	C	C	-	A	-

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	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Dichlorodifluoromethane (Freon 12)	D	D	A	B	D	A	-	A	A
Dichloroethane	D	C	D	D	D	A	-	C	A
Dichloroethylene	D	D	D	D	D	A	-	C	A
Dichloroethyl Ether	D	D	D	D	D	C	-	A	A
Dichlorohexane	D	D	D	D	D	A	-	A	A
Dichloromethane	D	D	D	D	D	A	-	A	A
Dichloropentane	D	D	D	D	D	A	-	A	A
Dieldrin in Xylene	D	D	D	D	D	A	-	A	-
Dieldrin in Xylene & Water Spray	D	D	B	B	D	A	-	A	-
Diesel Oil	D	D	A	D	D	A	-	B	A
Diethanolamine	C	A	B	-	A	D	-	A	A
Diethylamine	B	B	C	B	B	D	-	A	A
Diethyl Benzene	D	D	D	D	D	A	-	A	A
Diethyl Ether	D	D	B	C	D	D	-	A	-
Diethylene Dioxide	D	B	D	D	B	D	-	A	A
Diethyl Oxalate	C	C	D	D	A	C	-	A	A
Diethyl Phthalate	D	A	D	D	C	C	-	A	A
Diethyl Sebacate	D	A	D	D	C	B	-	A	A
Diethyl Sulfate	D	B	D	D	A	A	-	A	A
Diethyl Triamine	B	A	B	B	B	C	-	A	A
Dihydroxyethyl Ether	A	A	A	B	B	A	-	A	A
Diisobutylene	D	D	A	B	D	A	-	A	A
Diisobutyl Ketone	D	B	D	D	A	D	-	A	A
Diisodecyl Adipate	D	A	D	D	A	C	-	A	A
Diisodecyl Phthalate	D	A	D	D	A	C	-	A	A
Diisooctyl Adipate	D	A	D	D	A	C	-	A	A
Diisooctyl Phthalate	D	B	D	D	B	B	-	B	A
Diisopropanol Amine	B	A	B	D	A	C	-	A	A
Diisopropyl Benzene	D	D	C	D	D	A	-	A	A
Diisopropyl Ether	D	D	B	D	D	B	-	A	A
Diisopropyl Ketone	D	D	D	D	A	D	-	C	A
Dilauryl Ether	D	D	C	D	D	C	-	A	A
Dimethyl Benzene	D	D	D	D	D	A	-	A	A
Dimethylaniline	D	D	D	D	C	D	-	B	A
Dimethylformamide (DMF)	C	C	D	C	C	D	-	A	A
Dimethyl Ketone (Acetone)	B	A	D	C	A	D	-	A	A
Dimethyl Phthalate	D	A	D	D	B	C	-	A	A
Dimethyl Sulfate	D	B	D	D	D	D	-	A	A
Dimethyl Sulfide	D	C	D	D	D	C	-	B	A
Dinitrobenzene	D	C	D	C	C	A	-	A	A
Dinitrotoluene	D	D	D	D	D	B	-	A	A
Dioctyl Adipate (DOA)	D	A	D	D	B	C	-	A	A
Dioctyl Phthalate (DOP)	D	B	D	D	B	B	-	A	A
Dioctyl Sebacate (DOS)	D	B	D	D	B	B	-	A	A
Dioxane	D	B	D	D	B	D	-	-	A
Dioxolane	D	C	D	D	B	C	-	A	A
Dipentene (Limonene)	D	D	C	D	D	A	-	A	A
Diphenyl (Biphenyl)	D	D	D	D	D	A	-	A	-
Dipropyl Ketone	D	B	D	D	B	D	-	A	A
Disodium Phosphate	A	A	A	A	A	A	-	A	A
Divinyl Benzene	D	D	D	D	D	A	-	A	A
D.M.P. (Dimethyl Phenols)	D	D	D	D	D	D	-	C	A
Dodecyl Benzene	D	D	D	D	D	A	-	A	A
Diphenyl Oxide (Phenylether)	D	D	D	D	D	A	-	A	-
Dipropylene Glycol	A	A	A	A	A	A	-	A	A
Dodecyl Toluene	D	D	D	D	D	A	-	A	A
Dowfume W 40, 100%	D	D	D	C	C	C	-	B	-

	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Dow-Per (Perchloroethylene)	D	D	C	D	D	A	-	A	A
Dowtherm Oil, A & E	D	D	D	D	D	A	-	A	A
Dowtherm S.R.I.	A	A	A	A	A	A	-	A	A
Dry Cleaning Fluids	D	D	C	D	D	A	-	B	-
Epichlorohydrin	D	C	D	D	B	D	-	B	A
Ethanol (Ethyl Alcohol)	A	A	A	A	A	C	B	A	A
Ethers	C	C	C	C	D	D	D	B	A
Ethyl Acetate	B	B	D	D	A	D	D	B	A
Ethyl Acetaoacetate	D	B	D	D	B	D	-	A	A
Ethyl Acrylate	D	C	D	D	D	D	-	B	A
Ethyl Benzene	D	D	C	D	D	A	-	A	A
Ethyl Benzoate	D	B	B	C	B	C	-	A	-
Ethyl Butyl Alcohol	A	A	A	A	A	B	-	A	A
Ethyl Butyl Ketone	D	B	D	D	B	D	-	A	A
Ethyl Cellulose	B	B	B	B	B	D	-	A	A
Ethyl Chloride	A	A	D	B	A	B	D	C	A
Ethyl Dichloride	D	D	D	D	D	B	-	B	A
Ethylene	D	D	A	B	D	A	-	A	-
Ethylene Bromide	D	D	D	D	D	A	-	B	A
Ethylene Chloride	D	D	D	D	D	A	-	B	A
Ethylene Dibromide	D	D	D	D	D	B	-	B	A
Ethylene Dichloride	D	D	D	D	D	B	D	B	A
Ethylene Glycol	A	A	A	A	A	A	A	A	A
Ethylene Oxide	D	C	D	D	C	D	D	C	A
Ethylene Trichloride (Trichloroethylene)	D	D	C	D	D	A	-	B	A
Ethyl Ether	D	D	C	D	D	D	-	D	A
Ethyl Formate	D	B	D	D	C	D	-	A	A
Ethyl Hexanol	A	A	A	A	A	B	-	A	A
Ethyl Methyl Ketone	C	B	D	D	B	D	-	A	A
Ethyl Oxalate	A	A	D	D	B	C	-	A	A
Ethyl Phthalate	D	A	D	D	B	C	-	A	A
Ethyl Propyl Ether	D	D	D	D	D	C	-	A	-
Ethyl Propyl Ketone	D	B	D	D	B	D	-	A	A
Ethyl Silicate	C	A	A	A	A	A	-	A	A
Ethyl Sulfate	D	B	D	D	B	D	-	A	A
EX TRI (Trichlorethylene)	D	D	C	D	D	A	-	B	A
Fatty Acids	D	D	B	B	C	A	C	A	A
Ferric Bromide	A	A	A	A	A	A	-	A	A
Ferric Chloride	A	A	A	A	A	A	B	A	A
Ferric Nitrate	A	A	A	A	A	A	-	A	A
Ferric Sulfate	A	A	A	A	A	A	-	A	A
Ferrous Acetate	D	A	D	D	B	D	-	A	A
Ferrous Ammonium Sulfate	A	A	A	A	A	A	-	A	-
Ferrous Chloride	A	A	A	A	A	A	-	A	A
Ferrous Hydroxide	B	A	B	A	A	C	-	A	A
Ferrous Sulfate	A	A	A	A	A	A	-	A	A
Fish Oil	D	A	A	A	D	A	-	A	A
Fluoroboric Acid	A	A	A	B	A	C	A	A	A
Fluorine	D	D	D	D	D	D	-	D	B
Fluosilic Acid	B	A	B	B	B	A	-	A	A
Formaldehyde (Formalin)	A	A	A	C	A	A	B	A	A
Formamide	A	A	A	A	A	D	-	A	A
Formic Acid	-	A	B	C	A	D	C	A	A
Freon 11	B	D	A	B	D	A	-	A	-
Freon 12	D	D	B	C	C	B	-	B	-
Freon 13	A	A	A	A	A	A	-	A	-
Freon 21	D	D	D	B	D	D	-	A	-

CHEMICAL RESISTANCE RATING

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	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Freon 22	D	A	D	A	A	D	-	A	A
Freon31	B	A	D	A	A	D	-	A	-
Freon 32	A	A	A	A	A	C	-	A	-
Freon 112	D	D	B	B	D	A	-	A	-
Freon 113	C	D	A	A	D	B	-	A	-
Freon 114	A	A	A	A	A	B	-	A	-
Freon 115	A	A	A	A	A	B	-	A	-
Freon 142b	A	A	A	A	A	D	-	A	-
Freon 152a	A	A	A	A	A	D	-	A	-
Freon 218	A	A	A	A	A	A	-	A	-
Freon C316	A	A	A	A	A	A	-	A	-
Freon C318	A	A	A	A	A	A	-	A	-
Freon 13B1	A	A	A	A	A	A	-	A	-
Freon 114B2	D	D	B	A	D	B	-	A	-
Freon 502	A	A	B	A	A	B	-	A	-
Freon TF	C	A	A	A	A	A	-	A	-
Freon T-WD 602	C	A	A	B	B	A	-	A	-
Freon TMC	B	B	B	B	B	A	-	A	-
Freon T-P35	A	A	A	A	A	A	-	A	-
Freon TA	A	A	A	A	A	C	-	A	-
Freon TC	D	A	A	A	B	A	-	A	-
Freon MF	D	D	A	C	D	A	-	A	-
Freon BF	D	D	B	B	D	A	-	A	-
Fuel Oil	D	D	A	A	D	A	-	B	A
Fuel, ASTM A	D	D	A	-	D	A	-	-	A
Fuel, ASTM B	D	D	A	-	D	A	-	-	A
Fuel, ASTM C	D	D	B	C	D	A	-	-	A
Fumaric Acid	A	D	A	B	D	A	-	A	A
Furan	D	C	D	D	C	D	-	A	A
Furfural	D	A	D	C	C	D	-	A	A
Furfuryl Alcohol	D	C	D	C	C	D	-	A	A
Gallic Acid	A	B	B	B	B	B	-	A	A
Gasoline, Reg	D	D	A	A	D	A	-	A	A
Gasoline, Hi-Test	D	D	A	D	D	A	D	B	A
Gasoline, Lead Free	D	D	A	D	D	A	D	B	A
Gelatin	A	A	A	A	A	A	-	A	A
Gluconic Acid	D	C	C	C	C	A	-	A	A
Glucose	A	A	A	A	A	A	A	A	A
Glue	B	B	A	A	A	C	A	A	A
Glycerine (Glycerol)	A	A	A	A	A	A	A	A	A
Glycols	A	A	A	A	A	A	-	A	A
Grease	D	D	A	B	D	A	-	A	A
Green Sulfate Liquor	-	A	-	-	A	-	-	A	A
Halowax Oil	D	D	D	D	D	A	-	A	A
Heptachlor in Petroleum Solvents	D	D	B	B	D	A	-	A	A
Heptachlor in Petroleum Solvents, Water Spray	D	D	B	B	D	A	-	A	-
Heptanal (Heptaldehyde)	D	D	D	D	B	D	-	A	A
Heptane	D	D	A	A	D	A	-	A	A
Heptane Carboxylic Acid	D	C	C	B	C	A	-	A	A
Hexaldehyde	D	B	D	B	B	D	-	A	A
Hexane	D	D	A	A	D	A	-	A	A
Hexene	D	D	B	B	D	A	-	A	A
Hexanol (Hexyl Alcohol)	A	A	A	A	A	A	-	A	A
Hexylene	D	D	A	B	C	A	-	B	A
Hexylene Glycol	A	A	A	A	A	A	-	A	A
Hexyl Methyl Ketone	D	B	D	D	B	D	-	A	A
Hi-Tri (Trichloroethylene)	D	D	C	D	D	A	-	B	A

	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Hydraulic Fluid (Petroleum)	D	D	A	B	D	A	C	A	A
Hydraulic Fluid (Phospate Ester Base)	D	A	D	D	A	D	-	A	A
Hydraulic Fluid (Poly Alkylene Glycol Base)	B	A	A	A	A	A	-	A	-
Hydrobromic Acid	C	A	C	C	A	A	-	A	A
Hydrobromic Acid, 5%	B	B	D	D	A	A	-	A	A
Hydrobromic Acid, 15%	B	B	D	D	A	A	-	A	A
Hydrobromic Acid, 37%	-	-	-	C	A	A	-	A	A
Hydrocyanic Acid	B	C	B	C	C	A	-	A	A
Hydrofluoric Acid	D	C	D	D	C	A	D	B	A
Hydrofluosilic Acid	A	A	B	B	A	A	-	A	A
Hydrogen Gas	-	-	-	-	-	-	-	-	-
Hydrogen Peroxide, 3%	D	C	C	C	A	-	-	A	A
Hydrogen Peroxide, 10%	D	C	D	C	A	-	-	A	A
Hydrogen Peroxide, 30%	D	D	D	D	C	-	-	A	A
Hydrogen Peroxide, 90%	D	D	D	D	C	B	C	B	A
Hydrogen Sulfide	-	-	-	-	-	-	-	-	-
Hydroquinone	B	B	D	D	B	D	-	A	A
Hypochlorous Acid	B	B	D	B	B	A	D	A	-
Ink Oil (Linseed Oil Base)	D	B	B	B	B	A	-	A	A
Insulating Oil	D	D	A	B	D	A	-	A	A
Iodine	D	D	D	D	D	C	-	A	A
Iron Acetate	D	A	D	D	B	D	-	A	A
Iron Hydroxide	C	A	B	A	B	C	-	A	A
Iron Salts	A	A	A	A	A	A	-	A	A
Iron Sulfate	A	A	A	A	A	A	-	A	A
Iron Sulfide	A	A	A	A	A	A	-	A	A
Isomyl Acetate	D	A	D	D	B	D	-	A	A
Isomyl Alcohol	A	A	A	A	A	A	-	B	A
Isoamyl Bromide	D	D	D	D	D	B	-	B	A
Isoamyl Butyrate	D	C	D	D	C	D	-	B	A
Isoamyl Chloride	D	C	D	D	D	B	-	B	A
Isomyl Ether	D	D	D	D	D	D	-	A	A
Isoamyl Phthalate	D	A	D	D	B	C	-	A	A
Isobutanel (Isobutyl Alcohol)	A	A	B	A	A	B	-	A	A
Isobutyl Acetate	D	A	D	D	B	D	-	A	A
Isobutyl Aldehyde	C	B	D	D	B	D	-	A	A
Isobutyl Amine	B	B	D	D	B	D	-	A	A
Isobutyl Bromide	D	D	D	D	D	B	-	B	A
Isobutyl Carbinol	A	A	A	B	A	B	-	A	A
Isobutyl Chloride	D	D	D	D	D	B	-	B	A
Isobutylene	D	D	A	D	D	A	-	A	A
Isobutyl Ether	D	D	D	D	D	D	-	A	A
Isocyanates	C	B	D	D	B	C	-	B	A
Isoctane	D	D	A	A	D	A	-	A	A
Isopentane	D	D	A	A	D	A	-	B	A
Isopropyl Amine	B	A	B	A	B	D	-	A	A
Isopropyl Acetate	D	A	D	D	B	D	-	A	A
Isopropyl Alcohol (iso-propanol)	A	A	B	A	A	B	-	A	A
Isopropyl Amine	B	B	C	A	B	D	-	A	A
Isopropyl Benzene	D	D	D	D	D	A	-	A	A
Isopropyl Chloride	D	D	D	D	D	B	-	B	A
Isopropyl Ether	D	D	C	D	D	D	-	A	A
Isopropyl Toluene	D	D	D	D	D	A	-	A	A
Jet Fuels (JP1-JP6)	D	D	A	B	D	A	-	A	A
Kerosene	D	D	A	B	D	A	D	B	A
Ketones	D	B	D	D	A	D	-	A	A
Lactic Acid	C	C	C	C	C	A	A	A	A

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	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Laquers	D	C	D	D	D	D	-	B	A
Lacquer Solvents	D	C	D	D	D	D	D	B	A
Lard	D	D	A	B	C	A	B	A	A
Lauryl Alcohol	A	A	A	A	A	B	-	A	A
Lead Acetate	D	A	C	C	B	C	D	A	A
Lead Nitrate	A	A	A	A	A	A	-	A	A
Lead Sulfamate	B	A	B	A	A	A	-	A	-
Lead Sulfate	A	A	A	A	A	A	-	A	A
Ligroin	D	D	A	A	D	A	-	A	A
Lime Water	D	A	C	A	A	A	-	A	-
Linseed Oil	C	A	A	B	A	A	-	A	A
Lindol (Tricresyl Phosphate)	D	A	D	D	A	A	-	A	-
Liquid Soap	A	A	A	A	A	A	-	A	A
Liquid Petroleum Gas	D	D	A	B	D	A	-	-	A
Lubricating Oils	D	D	A	B	D	A	-	-	A
Lye (Sodium Hydroxide)	A	A	B	A	A	D	-	A	-
Magnesium Acetate	D	A	D	D	B	D	-	A	A
Magnesium Carbonate	A	A	A	A	A	A	-	A	A
Magnesium Chloride	A	A	A	A	A	A	A	A	A
Magnesium Hydrate	A	A	B	A	A	B	-	A	A
Magnesium Hydroxide	A	A	B	B	A	A	-	A	A
Magnesium Nitrate	A	A	A	A	A	A	-	A	A
Magnesium Sulfate	A	A	A	A	A	A	A	A	A
Malathion 50 in Aromatic Solvents	D	D	C	C	D	A	-	A	A
Malathion 50 in Aromatic Solvents, Water Spray	D	D	C	C	D	A	-	A	A
Maleic Acid	D	C	D	C	C	A	-	B	A
Maleic Anhydride	D	C	D	C	C	A	-	A	A
Malic Acid	A	D	B	C	D	A	B	A	A
Manganese Sulfate	A	A	A	A	A	A	-	A	A
Manganese Sulfide	C	A	A	B	B	A	-	A	A
Manganese Sulfite	C	A	A	B	B	A	-	A	A
Mercuric Chloride	B	A	B	C	A	A	-	A	A
Mercury	A	A	A	A	A	A	-	A	A
Methane	D	D	A	B	D	A	-	A	A
Methyl Acetate	C	B	D	D	B	D	-	A	A
Methyl Acrylate	C	B	D	C	B	D	-	A	A
Methacrylic Acid	D	B	D	B	B	D	-	A	-
Methyl Alcohol (Methanol)	A	A	A	A	A	C	A	A	A
Methyl Benzene (Toluene)	D	D	D	D	D	A	-	A	A
Methyl Bromide	D	D	D	D	D	B	-	C	A
Methyl Butyl Ketone	D	B	D	D	B	D	-	A	A
Methyl Cellosolve	D	B	C	B	B	D	-	A	A
Methyl Chloride	C	C	C	C	C	A	D	C	A
Methyl Cyclohexane	D	D	D	D	D	B	-	B	A
Methylene Bromide	D	D	D	D	D	B	-	C	A
Methylene Chloride	D	D	D	D	D	B	-	B	A
Methyl Ethyl Ketone (MEK)	D	B	D	D	A	D	D	A	A
Methyl Formate	C	B	D	B	B	C	-	B	A
Methyl Hexanol	A	A	A	A	A	B	-	A	A
Methyl Hexyl Ketone	D	B	D	D	B	D	-	A	A
Methyl Isobutyl Carbinol	B	A	B	B	A	B	-	A	A
Methyl Isobutyl Ketone (MIBK)	D	B	D	D	A	D	-	A	A
Methyl Isopropyl Ketone	D	B	D	D	C	D	-	A	A
Methyl Propyl Ether	D	D	D	D	D	D	-	A	A
Methyl Propyl Ketone	D	B	D	D	B	D	-	A	A
Methyl Methacrylate	D	D	D	D	D	D	-	B	A
Methyl Salicylate	D	B	D	D	B	C	-	B	A

	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Methyl tert-Butyl Ether (MTBE)	D	D	D	D	D	D	-	D	D
Mineral Oil	D	D	A	B	D	A	-	-	A
Mineral Spirits	D	D	A	B	D	A	-	A	A
Monochlorobenzene	D	D	D	D	D	A	-	A	A
Monochlorodifluoromethane (Freon 22)	D	A	D	A	A	D	-	A	A
Monomethylether	B	A	A	A	A	C	-	A	-
Monovinyl Acetate	D	B	D	D	C	A	-	A	-
Motor Oil	D	D	A	A	D	A	-	A	A
Muriatic Acid	-	-	-	C	A	A	-	A	A
Naphtha	D	D	A	B	D	A	D	A	A
Napthalene	D	D	D	D	D	A	-	A	A
Napthenic Acid	D	D	C	D	D	A	-	A	A
Neatsfoot Oil	D	B	A	B	B	A	-	A	A
Neu-Tri (Trichloroethylene)	D	D	C	D	D	A	-	B	A
Nickel Acetate	D	A	D	D	B	D	-	A	A
Nickel Chloride	A	A	A	A	A	A	A	A	A
Nickel Nitrate	A	A	A	A	A	A	-	A	A
Nickel Plating Solution	A	B	B	C	B	A	-	A	A
Nickel Sulfate	A	A	A	A	A	A	-	A	A
Niter Cake	A	A	A	A	A	A	-	A	A
Nitric Acid, 10%	D	C	D	C	C	C	-	A	A
Nitric Acid, 20%	D	B	D	D	C	A	-	A	A
Nitric Acid, 30%	D	B	D	D	C	A	-	B	A
Nitric Acid, 30-70%	D	C	D	D	D	C	-	D	A
Nitric Acid, Red Fuming	D	D	D	D	D	D	-	D	A
Nitrobenzene	D	D	D	D	D	B	D	B	A
Nitrogen Gas	A	A	A	A	A	A	-	A	A
Nitrogen Tetraoxide	D	D	D	D	D	D	-	D	A
Nitromethane	B	B	D	C	B	D	-	A	A
Nitropropane	C	A	D	C	B	D	-	A	A
Nitrous Oxide	A	A	A	A	A	A	-	A	A
Octadecanoic Acid	D	B	A	B	C	C	-	A	A
Octane	D	D	A	B	D	A	-	B	A
Octanol (Octyl Alcohol)	B	B	B	A	B	A	-	A	A
Octyl Acetate	D	A	D	D	B	D	-	A	A
Octyl Carbinol	A	A	A	A	A	B	-	A	A
Octylene Glycol	A	A	A	A	A	A	-	A	A
Oil, Petroleum	D	D	A	A	D	A	-	A	A
Oil, ASTM #1	D	D	A	A	D	A	-	-	A
Oil, ASTM #2	D	D	A	A	D	A	-	-	A
Oil, ASTM #3	D	D	A	B	D	A	-	-	A
Oleic Acid	D	B	B	C	B	C	D	A	A
Oleum (Fuming Sulfuric Acid)	D	D	D	D	D	D	-	D	A
Olive Oil (Non FDA)	D	B	A	B	B	A	-	A	A
Orthodichlorobenzene	D	D	D	D	D	A	-	B	A
Oxalic Acid (Cold)	B	A	B	B	A	A	B	A	A
Oxygen, Cold	B	A	C	A	A	A	-	A	A
Oxygen, HotB	A	C	A	A	A	-	A	A	
Ozone	D	B	D	B	A	A	-	A	A
Paint Thinner (Duco)	D	D	D	D	D	C	-	A	A
Palmitic Acid (Hexadecanoic Acid)	D	B	A	A	B	A	D	A	A
Palm Oil	D	A	A	B	B	A	-	A	A
Papermaker's Alum	A	A	A	A	A	A	-	A	A
Paradichlorobenzene	D	D	D	D	D	A	-	B	-
Paraffin	D	D	A	A	D	A	-	D	A
Paraformaldehyde	D	B	B	B	B	C	-	A	A
Peanut Oil	D	C	A	B	D	A	-	A	A

CHEMICAL RESISTANCE RATING

A = Good Resistance | **B** = Fair Resistance | **C** = Depends On Conditions | **D** = Not Recommended

	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Pentane	D	D	A	A	D	A	-	A	A
Perchloroethylene	D	D	C	D	D	A	-	C	A
Perchloric Acid	B	B	D	A	B	A	D	A	A
Petrolatum	D	D	A	A	D	A	-	A	-
Petroleum, Crude	D	D	A	B	D	A	-	D	A
Petroleum Ether (Naphtha)	D	D	A	A	D	A	-	A	A
Petroleum Oils	D	D	A	A	D	A	-	A	A
Phenol 10%	C	B	D	C	C	A	-	A	A
Phenol Sulfonic Acid	D	C	D	C	C	A	-	B	A
Phenyl Chloride	D	D	D	D	D	A	-	A	A
Phenylhydrazine	C	B	D	D	C	A	-	A	-
Phorone	D	A	D	D	B	C	-	A	A
Phosphate Esters	D	A	D	D	A	C	-	A	-
Phosphoric Acid, 10%	A	A	A	A	A	A	-	A	A
Phosphoric Acid, 10-85%	C	A	C	B	A	A	-	A	A
Phosphorous Trichloride	D	A	D	D	A	A	-	A	-
Pickling Solution	C	C	C	C	C	B	-	A	A
Picric Acid, Molten	C	C	C	C	C	C	-	D	A
Picric Acid, Water Soln.	A	A	B	B	B	C	-	A	A
Pinene	D	D	A	D	D	A	-	A	A
Pine Oil	D	D	C	C	D	B	-	A	A
Piperidine	D	D	D	D	D	D	-	B	A
Pitch	D	D	B	B	D	C	-	A	A
Plating Solution, Chrome	D	A	B	B	A	B	-	A	A
Plating Solution, Others	A	A	B	B	A	B	D	A	-
Polyvinyl Acetate Emulsion (PVA)	C	A	C	B	A	C	-	A	A
Polyethylene Glycol	A	A	A	A	A	A	-	A	A
Polypropylene Glycol	A	A	A	A	A	A	-	A	A
Potassium Bicarbonate	A	A	A	A	A	A	-	A	A
Potassium Bisulfate	A	A	A	A	A	A	-	A	A
Potassium Bisulfite	A	A	A	A	A	A	-	A	A
Potassium Carbonate	A	A	A	A	A	A	-	A	A
Potassium Chloride	A	A	A	A	A	A	-	A	A
Potassium Chromate	D	A	D	C	B	A	-	A	A
Potassium Cyanide	A	A	A	A	A	A	-	A	A
Potassium Dichromate	D	A	D	B	B	A	-	A	A
Potassium Hydrate	A	A	B	B	A	C	-	A	A
Potassium Hydroxide	B	A	C	C	A	C	C	A	A
Potassium Nitrate	A	A	A	A	A	A	-	A	A
Potassium Permanganate	D	A	D	D	A	A	-	A	A
Potassium Silicate	A	A	A	A	A	A	-	A	A
Potassium Sulfate	A	A	A	A	A	A	-	A	A
Potassium Sulfide	A	A	A	A	A	A	-	A	A
Potassium Sulfite	A	A	A	A	A	A	-	A	A
Producer Gas	D	D	A	B	D	A	-	A	-
Propanediol	A	A	A	B	A	A	-	A	A
Propyl Acetate	D	B	D	D	B	D	-	A	A
Propyl Alcohol (Propanol)	A	A	A	A	A	A	-	A	A
Propyl Aldehyde	C	B	D	D	B	D	-	A	A
Propyl Chloride	D	C	D	C	C	B	-	B	A
Propylene Dichloride	D	D	D	D	D	B	-	B	A
Propylene Glycol	A	A	A	A	A	A	-	A	A
Pydraul Hydraulic Fluids	D	B	D	D	B	C	-	B	A
Pyranol	D	D	C	D	D	A	-	A	-
Pyridine	D	B	D	D	B	D	D	A	A
Pyroligneous Acid	C	B	C	B	B	A	-	A	-
Pyrrole	C	B	D	D	C	C	-	A	-

	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Rape Seed Oil	D	A	B	B	B	A	-	B	A
Red Oil (Crude Oleic Acid)	D	B	B	B	B	B	-	A	A
Richfield A Weed Killer, 100%	D	D	D	D	D	C	-	B	A
Richfield B Weed Killer, 33%	D	B	B	B	D	C	-	B	A
Rosin Oil	D	D	A	A	D	A	-	A	-
Rotenone and Water	A	A	A	A	A	A	-	A	-
Rum	FDA TUBE REQUIRED								
Sal Ammoniac (Ammonium Chloride)	A	A	A	A	A	A	-	A	-
Salicylic Acid	A	A	D	D	A	A	-	A	A
Salt Water (Sea Water)	A	A	A	A	A	A	A	A	A
Sewage	C	C	A	B	C	A	-	A	A
Silicate of Soda (Sodium Silicate)	A	A	A	A	A	A	-	A	A
Silicate Esters	D	D	B	A	D	A	-	A	-
Silicone Greases	A	A	A	A	A	A	-	A	A
Silicone Oils	-	A	A	A	A	A	-	A	A
Silver Nitrate	A	A	A	A	A	A	A	A	A
Skelly Solvent	D	D	A	B	D	A	-	A	-
Skydrol Hydraulic Fluids	D	A	D	D	A	D	-	A	A
Soap Solutions	A	A	A	B	A	A	B	A	A
Soda Ash (Sodium Carbonate)	A	A	A	A	A	A	-	A	A
Soda, Caustic (Sodium Hydroxide)	A	A	B	A	A	D	-	A	A
Soda, Lime	A	A	B	B	A	C	-	A	A
Soda Niter (Sodium Nitrate)	A	A	A	A	A	A	-	A	A
Sodium Acetate	D	A	D	D	B	D	-	A	A
Sodium Aluminate	A	A	A	A	A	A	-	A	A
Sodium Bicarbonate	A	A	A	A	A	A	A	A	A
Sodium Bisulfate	A	A	A	A	A	A	-	A	A
Sodium Bisulfite	A	A	A	A	A	A	A	A	A
Sodium Borate	A	A	A	A	A	A	A	A	A
Sodium Carbonate	A	A	A	A	A	A	A	A	A
Sodium Chloride	A	A	A	A	A	A	B	A	A
Sodium Chromate	D	A	D	C	B	C	-	B	A
Sodium Cyanide	A	A	A	A	A	A	-	A	A
Sodium Dichromate	D	A	D	C	B	C	-	A	A
Sodium Fluoride	A	A	A	A	A	A	-	A	A
Sodium Hydroxide	-	A	C	C	A	C	A	A	A
Sodium Hypochlorite	D	A	D	D	A	A	B	C	A
Sodium Metaphosphate	A	A	A	C	A	A	-	A	A
Sodium Nitrate	C	A	C	C	A	A	D	A	A
Sodium Nitrite	A	A	A	A	A	A	-	A	A
Sodium Perborate	C	A	C	C	A	A	-	B	A
Sodium Peroxide	C	A	C	C	A	A	-	C	A
Sodium Phosphate	A	A	B	C	A	A	-	A	A
Sodium Silicate	A	A	A	A	A	A	A	A	A
Sodium Sulfate	A	A	A	A	A	A	-	A	A
Sodium Sulfide	A	A	A	A	A	A	A	A	A
Sodium Sulfite	A	A	A	A	A	A	A	A	A
Sodium Thiosulfate	A	A	A	A	A	A	-	A	A
Soybean Oil	D	A	A	B	A	A	-	A	A
Stannic Chloride	A	B	A	A	B	A	-	A	A
Stannic Sulfide	A	A	A	A	A	A	-	A	A
Stannous Chloride	A	A	A	A	A	A	-	A	A
Stannous Sulfide	A	A	A	A	A	A	-	A	A
Stearic Acid	D	B	B	C	B	A	B	A	A
Stoddards Solvent	D	D	A	C	D	A	D	A	A
Styrene	D	D	D	D	D	A	-	-	A
Sugar Sols. (Sucrose) Non F.D.A.	A	A	A	A	A	A	-	A	A

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	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Sulfamic Acid	C	A	B	B	A	C	-	A	A
Sulfite Liquors	B	A	B	B	B	A	-	A	A
Sulfonic Acid	D	D	D	C	D	D	-	B	A
Sulfur (Molten)	B	A	B	A	A	A	-	A	A
Sulfur Chloride	D	D	C	C	D	A	-	B	A
Sulfur Dioxide	C	C	C	C	C	A	-	A	A
Sulfur Hexafluoride	A	A	A	A	A	A	-	A	A
Sulfur Trioxide	D	C	C	C	C	A	-	D	A
Sulfuric Acid, 25%	B	B	B	A	-	A	D	A	A
Sulfuric Acid, 25-50%	B	A	D	C	-	A	D	A	A
Sulfuric Acid, Fuming	D	D	D	D	D	A	D	D	A
Sulfurous Acid	C	C	C	C	C	A	D	A	A
Tall Oil	D	D	A	B	D	A	-	A	A
Tallow	D	D	A	A	D	A	-	A	A
Tannic Acid	A	A	C	A	A	A	B	A	A
Tar	D	D	C	C	D	B	-	D	A
Tartaric Acid	A	B	C	C	B	A	A	A	A
Terpineol	D	C	D	D	C	A	-	B	A
Tertiary Butyl Alcohol	A	A	A	A	A	A	-	A	A
Tetrachlorobenzene	D	D	D	D	D	B	-	B	A
Tetrachloroethane	D	D	D	D	D	A	-	B	A
Tetrachloroethylene	D	D	D	D	D	A	-	B	A
Tetraethylene Glycol	A	A	A	A	A	A	-	A	A
Tetrachloromethane	D	D	C	D	D	A	-	B	A
Tetrachloronapthalene	D	D	D	D	D	B	-	B	A
Tetraethyl Lead	D	D	B	C	D	A	-	A	A
Tetrahydrofuran (THF)	D	D	D	D	D	D	-	A	A
Thionyl Chloride	D	D	D	D	D	B	-	A	A
Tin Chloride	A	A	A	A	A	A	B	A	A
Tin Tetrachloride	A	A	A	A	A	A	-	A	A
Titanium Tetrachloride	D	D	B	C	C	A	-	A	A
Toluene (Toluol)	D	D	C	D	D	A	D	C	A
Toluene Diisocyanate (TDI)	C	A	C	D	A	B	-	A	A
Toxaphene	D	D	B	B	D	A	-	A	-
Transformer Oils (Petroleum Base)	D	D	A	B	D	A	-	A	A
Transformer Oils	D	D	D	D	D	A	-	B	A
(Chlorinated Phenyl Base Askerels)									
Transmission Fluids - A	D	D	B	C	D	A	-	A	A
Transmission Fluids - B	D	D	C	D	D	A	-	A	-
Tricetin	A	A	B	B	A	D	-	A	-
Tributyl Phosphate	D	B	D	D	B	D	-	A	A
Trichlorobenzene	D	D	D	D	D	B	-	B	A
Trichloroethane	D	D	D	D	D	A	-	A	A
Trichloroethylene	D	D	D	D	D	A	D	B	A
Trichloropropane	D	D	D	D	D	A	-	A	A
Tricresyl Phosphate (TCP)	D	A	D	D	B	B	-	A	A
Triethylene Glycol	A	A	A	A	A	A	-	A	A
Trinitrotoluene (TNT)	D	D	D	B	D	B	-	D	-
Triphenyl Phosphate	D	A	D	C	B	C	-	A	A
Trisodium Phosphate	A	A	A	A	A	A	-	A	A
Tung Oil	D	C	A	B	D	A	-	A	A
Turbine Oil	D	D	B	B	D	A	-	A	-
Turpentine	D	D	B	D	D	A	D	B	A
2,4D with 10% Fuel Oil	D	D	A	A	D	A	-	A	-
Ucon Hydrolube Oils	D	A	A	B	A	A	-	A	A
Undecanol	A	A	A	A	A	B	-	A	A
Unsymmetrical Dimethyl-Hydrazine (UDMH)	D	A	D	D	A	D	-	C	-

	Natural Rubber	Butyl	Nitrile	Neoprene	EPDM	FKM/Viton	Silicone	UHMWPE	FEP/Teflon
Uran	B	B	B	B	B	C	-	A	-
Varnish	D	D	B	B	D	A	-	A	A
Vegetable oils	D	A	A	B	A	A	-	A	A
Versilube	C	A	A	C	A	A	-	A	A
Vinegar	C	A	C	C	A	A	-	A	A
Vinyl Acetate	D	A	D	D	B	A	-	A	A
Vinyl Benzene	D	D	D	D	D	A	-	B	A
Vinyl Chloride (Monomer)	C	D	D	D	D	A	-	A	A
Vinyl Ether	D	D	D	D	C	D	-	A	-
Vinyl Toluene	D	D	D	D	D	A	-	B	A
Vinyl Trichloride	D	D	D	D	D	A	-	A	A
V.M. & P. Naptha	D	D	A	A	D	A	-	A	A
Water, Fresh (non F.D.A.)	A	A	A	C	A	A	B	A	A
Water, Salt	A	A	B	A	A	A	A	A	A
Whiskey, Wines	FDA TUBE REQUIRED								
White Liquor	A	B	A	A	C	A	-	A	-
White Oil	D	D	A	B	D	A	-	A	A
Wood Alcohol (Methanol)	A	A	A	A	A	D	-	A	A
Xylene (Xy101)	D	D	C	D	D	A	D	C	A
Xylidine	D	D	D	D	D	C	-	B	A
Zeolites	B	C	C	A	A	A	-	A	-
Zinc Acetate	C	A	C	C	B	D	-	A	A
Zinc Carbonate	A	A	A	A	A	A	-	A	A
Zinc Chloride	C	A	C	C	A	A	B	A	A
Zinc Chromate	A	A	A	A	A	A	-	B	A
Zinc Sulfate	A	A	A	A	A	A	-	A	A

Notes:

Notes:

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