# Fre-Thane® Polyurethane Coils



re-Thane® polyurethane coils possess outstanding memory, a soft feel and superior flexibility. These coils are extraordinarily tough and resistant to abrasion, overstretching, kinking and repeated flexing.

Variations are easy. If you don't see the color or length that you want, just ask us. We can configure Fre-Thane® Coils to perfectly match your requirements.

#### **Specifications**

Temperature Range -40°F to +125°F

Vacuum Rating
To 28" Hg.

Diameter Tolerances ±.005"

Working Pressure 3:1 Safety Factor

UV Stabilized 95A & 85A

Resin Compliance See Page 8 for Fre-Thane Compliances

Suggested Fittings

#### Fre-Thane® Single Tube Polyurethane Coils

**Standard Tail Lengths** 8" and 16"

Fre-Inane <sup>®</sup> Single Tube Polyuretnane Colls							Barb, Push-In (95A)			
Part Number & Color Code	OD	ID	DUR	Standard Colors		Pressure 150°F/65°C	Material Length	Working Length	Retracted Length	Coil ID
1W-013	1/8"	.066"	85A	0) 02 04 05 06 07 08 09 10 11 12 14 25 26 27 28 29 32 45 46	115 PSI	45 PSI	10'	8'	8"	3/8"
1W-025	1/4"	1/8"	85A	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	125 PSI	50 PSI	10'	8'	5"	3/4"
1W-132	1/4"	.159"	90A	① 07 08 (0 14 25 27	115 PSI	45 PSI	10'	8'	5"	3/4"
1W-005 1Z-005	3/8"	.245"	90A	<b>0</b> 0000112522	105 PSI	40 PSI	10' 25'	8' 20'	7.5" 22"	1-1/4"
1W-151 1X-151 1Y-151 1Z-151	1/4" 1/4"	.16" .16" .16" .16"	95A 95A 95A 95A	① 04 05 06 07 08 09 ① ① 12 25 26 27 28 46	150 PSI	60 PSI	10' 15' 20' 25'	8' 12.5' 17' 20'	7" 9.5" 12.5" 15.5"	1"
1W-152 1X-152 1Y-152 1Z-152	3/8" 3/8"		95A 95A 95A 95A	0) 04 05 06 07 08 10 (11) 25 26 27 28 37 46	130 PSI	60 PSI	10' 15' 20' 25'	8' 12.5' 17' 20'	6" 9.5" 13" 16"	1-3/4"
Variations Available: Colors • Cutting • Bonding • Printing • Packaging							• Sizes			

Variations Available: Color

Colors • Cutting • Bonding • Printing • Packaging • Size

### **Metric Fre-Thane® Single Tube Polyurethane Coils**

Part Number & Color Code	OD	ID	DUR	Standard Colors		Pressure 150°F/65°C	Material Length	Working Length	Retracted Length	Coil ID	Tail Length
1W-156	4mm	2.4mm	95A				3.05 M	2.6 M	133.4mm		
1X-156	4mm	2.4mm	95A	01 02 04 05 06 07 08 09	165 PSI	85 PSI	4.57 M	3.8 M	216mm	10 1 14 0	0/22 0
1Y-156	4mm	2.4mm	95A	10 11 12 25 <mark>26 27 28 37</mark>		00 101	6.1 M	5.2 M	292mm	19.1mm 16.9	9/33.9mm
1Z-156	4mm	2.4mm	95A				7.62 M	6.4 M	381mm		
1W-158	6mm	4mm	95A				3.05 M	2.6 M	139.7mm		
1X-158- —	6mm	4mm	95A	000000000000000000000000000000000000000	125 DCI	65 PSI	4.57 M	3.8 M	241.3mm	25.4mm 16.9	/22 0
1Y-158	6mm	4mm	95A	(11) <b>25 26 27 28 37</b>	133 131	00 101	6.1 M	5.2 M	330mm	23.4mm 10.9	/33.7mm
1Z-158	6mm	4mm	95A				7.62 M	6.4 M	419mm		
1W-159	8mm	5mm	95A				3.05 M	2.6 M	152.4mm		
1X-159	8mm	5mm	95A	01 05 06 07 08 10 11 22	5 160 PSI	75 PSI	4.57 M	3.8 M	254mm	21.0 1/.0	0/00.0
1Y-159	8mm	5mm	95A	27 37 46	100 131	/3 P3I	6.1 M	5.2 M	343mm	31.8mm 16.9	9/33.9mm
1Z-159- —	8mm	5mm	95A				7.62 M	6.4 M	444.5mm		
1W-160	10mm	6.5mm	95A				3.05 M	2.6 M	139.7mm		
1X-160	10mm	6.5mm	95A	000000000000000000000000000000000000000	10 <i>E</i> DCI	70 DCI	4.57 M	3.8 M	228.6mm	445 140	/22.0
1Y-160	10mm		95A		135 PSI	70 PSI	6.1 M	5.2 M	317.5mm	44.5mm 16.9	/33.Ymm
1Z-160	10mm	6.5mm	95A				7.62 M	6.4 M	406.4mm		

Variations Available:

Colors • Cutting • Bonding • Printing • Packaging • Sizes

## **Resource Guide-Chemical Resistance Chart**

his information was provided to Freelin-Wade by our suppliers and other sources. It is to be used only as a general reference guide to aid in the selection of products in which chemical and material compatibility issues are a factor. This guide is not intended as a complete nor conclusive database. Freelin-Wade does not guarantee these ratings since the resistance of a material can be greatly affected by the temperature, consistency, and presence of other chemicals. Ultimately, the consumer must determine the chemical compatibility of an item based on the conditions in which the product is being used.

	PUR	PE	PVC	Nylon	Kynar
Acetic Acid, Glacial Acetic Acid, 30%	4	2	4	2	1
Acetone	4	2	4	1	4
Acetylene Alkazene	4	•	1	1	-
Aluminum Chloride (aq) Aluminum Nitrate (aq)	3	2	1 2		1
Ammonia Anhydrous	4	2	1	i	4
Ammonia Gas (cold) Ammonia Gas (hot) Ammonium Chloride (aq) 40%	4		-	1	4
Ammonium Chloride (aq) 40% Ammonium Sulfate (aq)	2	1	1	1	1
Amyl Alcohol Amyl Naphthalene	4	2	1		1
Animal Fats	1	-	-		-
Aqua Regia Arsenic Acid	3	2	3		1
Asphalt ASTM Fuel A	2	1	1		1
ASTM Fuel B	3	-	. 4		-
ASTM Fuel C Barium Chloride (aq)	3 1	1	1	1	1
Beer Beet Sugar Liquors	2	2	1	1	1
Benzene	3	4	3	1	1
Benzine Blast Furnace Gas	2	-	-	-	
Bleach Solutions Borax	4	1	1		1
Boric Acid	1	1	i	-	1
Brake Fluid Brine	2	•	3	•	1
Bromine Water	4 2	-	3	4	1
Bunker Oil Butane	1	3	3	1	1
Butter Butyl Alcohol (Butanol)	3	1	3	1	1
Butylene Calcium Chloride (aq)	4	1	1	i	1
Calcium Hydroxide (aq)	2	i	2		1
Calcium Nitrate (aq) Calcium Sulfide (aq)	1	-	1	1	1
Cane Sugar Liquors	4	- 4	1	-	1
Carbolic Acid Carbon Dioxide	1	2	1	-	1
Carbonic Acid Carbon Monoxide	4	2	1	-	1
Carbon Tetrachloride Castor Oil	4	4	4	3	1
Chlorine (dry) Chlorine (wet)	4	3	4	4	1
Chlorine (wet) Chloroform	4	3	4	3	1
Chlorox	4	ī	4	4	1
Chromic Acid 50%	1	i	2	1	1
Coal Tar (Creosote) Coconut Oil	3	i .	1	-	1
	1	1	1		-
Copper Chloride (aq)	1	2	1		1
Coke Oven Gas Copper Chloride (aq) Copper Cyanide (aq) Corn Oil	1	2	1 2		1
Coffon Seed Oil	1	1	2	4	1
Creosol (Methyl Phenol) Cychlohexane	1	4	4	1	i
Denatured Alcohol Detergent Solution	3	1	1		
Diesel Oil	2	3	1		4
Dioxane Dowtherm Oil	3	-	-	- :	-
Dry Cleaning Fluids Ethane	4	-	1	-	-
Ethyl Acrylate	4	- 2	- 3	3	1
Ethyl Alcohol (Ethanol) Ethyl Benzine	4	-	-	-	-
Ethyl Cellulose Ethyl Chloride	2	4	4		1
Ethyl Ether	3	4	4	-	1
Ethylene Chloride Ethylene Glycol <sup>5</sup> (Anti-Freeze)	4	<b>4</b> 1	4 1	1	1
Ethylene Oxide Ethylene Trichloride Ferric Chloride (aq) Ferric Sulfate (aq) Ferric Sulfate (aq)	4	3	3	1	1
Ferric Chloride (aq)	1	2	1		1
Ferric Sulfate (aq)	1 2	- 1	1		1
Fluroine (Liquid) Formaldehyde (RT)	4	3	4	1	1
Formic Acid Freon 11	4	2	į	4	1
Freon 12	4 1	3 1	1	1	-
Freon 22 Fuel Oil (Bunker 'C')	4 2	3	1	1	1
Gasoline (100 Octane, High Test)	3	4	3	1	1
Glue Glycerin (Glycerol)	1	1	3	1	1
Glycerin (Glycerol) Glycols Green Sulfate Liquor	4	-	-	1 -	-
Hexane	2	41	2 <sup>2</sup>	-	ī
Hydraulic Oil Hydrochloric Acid (cold) 37%	1	1-3 2	1 2	4	1
Hydrochloric Acid (hot) 37%	4	-	-	4	1
Hydrofluroic Acid (Conc.) (cold) Hydrofluroic Acid (Conc.) (hot)	4	2	-	•	1
Hydrogen Gas Isobutyl Alcohol	3	1	1 -	1	1
Isooctane	3 2 4	3	1		1
Isopropyl Acetate Isopropyl Alcohol (Isopropanol)	3	1	-	1	1
Isopropyl Ether Kerosene	2 1	1 4	2	1	1
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	PUR	PE	PVC	Nylon	Kynar
Lacquers Lacquer Solvents	4	1	4		
Lard	1	i	i		1
Lavender Oil Lead Acetate (aq)	4	1	1		1
Linseed Oil Liquified Petroleum Gas	2	3	1	1	1
Lubricating Oils	1-2 <sup>3</sup>	4	2	1	1
Lye Magnesium Chloride (aq)	4	1-4 <sup>4</sup>	1-2	1	1
Magnesium Hydroxide (aq)	4	2	1	-	1
Mercury Methane	3	1	1 2	1	1
Methyl Acetate	4	2	4	1	1
Methyl Acrylate Methyl Alcohol (Methanol)	4	1	1	i	i
Methyl Butyl Ketone Methyl Chloride	4	4	1	1	1
Methylene Chloride Methyl Ethyl Ketone	4	4	4	-	1
Methyl Ethyl Ketone Methyl Isobutyl Ketone	4	2	4	1	4
Milk	4	- 1	- 1	1	1
Mineral Oil Motor Oil 20W, 10W40	1	3	1	1	1
Naphtha (Lighter Fluid)	2	4	1	1	1
Naphthalene (Moth Repellent) Natural Gas	2	2	4 1	1	1
Neatsfoot Oil Nitric Acid 70%	1	-	-	- 4	1
Nitric Acid (Dilute) 10%	3	2	1	4	1
Nitroethane	4	i	-		1
N-Octane Oleic Acid	2	1	3	1	1
Oleic Acid Oleum Spirits Olive Oil	3 1	4	4		4 1
Oxygen (cold)	1	-	-	1	1
Oxygen (cold) Oxygen (200-400F)	4		-		
Paint Thinner, Duco Perchloric Acid	4	ī	3	-	1
Perchloroethylene	2	3	3	3	1
Petroleum - Below 250F Petroleum - Above 250F	4	-	-	4	-
Phenol (Carbolic Acid) Phenyl Ethyl Ether Phosphoric Acid - 45%	3	2	3-4	4	1
Phosphoric Acid - 45%	4	1	2	2	1
Pickling Solution Picric Acid	4	1	4	3	1
Potassium Acetate (aq)	4	-	-	-	1
Potassium Chloride (aq) Potassium Cyanide (aq)	1	2	1		1
Potassium Hydroxide (aq)	4	1	1	3	4
Producer Gas Propane	1	1	1	1	1
Propyl Alcohol (Propanol)	4	ī	1	-	1
Propylene Propylene Glycol (Anti-Freeze)	3	1	3	2	1
Propylene Oxide	4	2	-	-	4
Pydraul, 10E, 29 ELT Pydraul 30E, 50E, 65E	4		-		
Pydraul, 115E	4	-		- :	
Pydraul 230E, 312C, 540C Rapeseed Oil	2	4	-	-	-
RJ-1 (MIL-F-23338 B) RP-1 (MIL-F-25576 C)	1				
Salt Water	2	1	1	1	1
Sewage Silicate Esters	1	-	-	-	1
Silicone Oils	1	1	i	•	1
Silver Nitrate Skydrol 500	1	1	1		1
Skydrol 500 Skydrol 700	4	-	-	-	
Soap Solutions Sodium Chloride (aq)	3	4	1	1	-
Sodium Hydroxide (aq)	4	1	1	2	4
Sodium Peroxide (aq) Sodium Phosphate (aq)	1	1 -	2		1
Sodium Sulfate (aq)	1	1	1		-
Soy Bean Oil Stoddard Solvent	2 1	3	1		1
Styrene (Monomer)	4	2	4	- 1	1
Sucrose Solution Sulfuric Acid (Dilute Battery Acid)	3	1	i	-	i
Sulfuric Acid (Conc) Sulfuric Acid (20% Oleum)	4	2	4		1
Sulturous Acid	4	2	1	- :	-
Tannic Acid Tetrochlorethylene	4	1 2	1		1
Toluene (Toluol)	4	3	4	1	1
Transformer Oil Transmission Fluid Type A	2		2	-	
Trichloroethane	4	4	3	3	1
Trichloroethylene Turbine Oil	<b>4</b> 1	3	4	3 1	1
Turpentine	4	4	4	1	1
Varnish Vinegar	3	3	4	1	1
Vinyl Chloride	4	4	4	-	1
Water Whiskey, Wines	1 2	1	1	1	1
White Oil	1	-	-	-	-
Wood Oil Xylene	3	4	4	1	1
Zinc Acetate (aq)	4	-			i
Zinc Chloride (aq)	2	1	T		1
1 Petroleum Base 2 Synthetic	Base =	1. Petr	oleum	Base :	= 3

## **Rating Scale**

- 1= Little or no impact
- 2= Minor effect
- 3= Moderate effect
- 4= Severe effect

**1** Petroleum Base **2** Synthetic Base = 1, Petroleum Base = 3 **3** SAE 10, 20, 30, 40, 50 = 1, Petroeum = 2

4 Calcium Hydroxide & Potassium (Hydroxide=1, Sodium Hydroxide=4) 5 See Propylene Glycol 6 See Ethylene Glycol