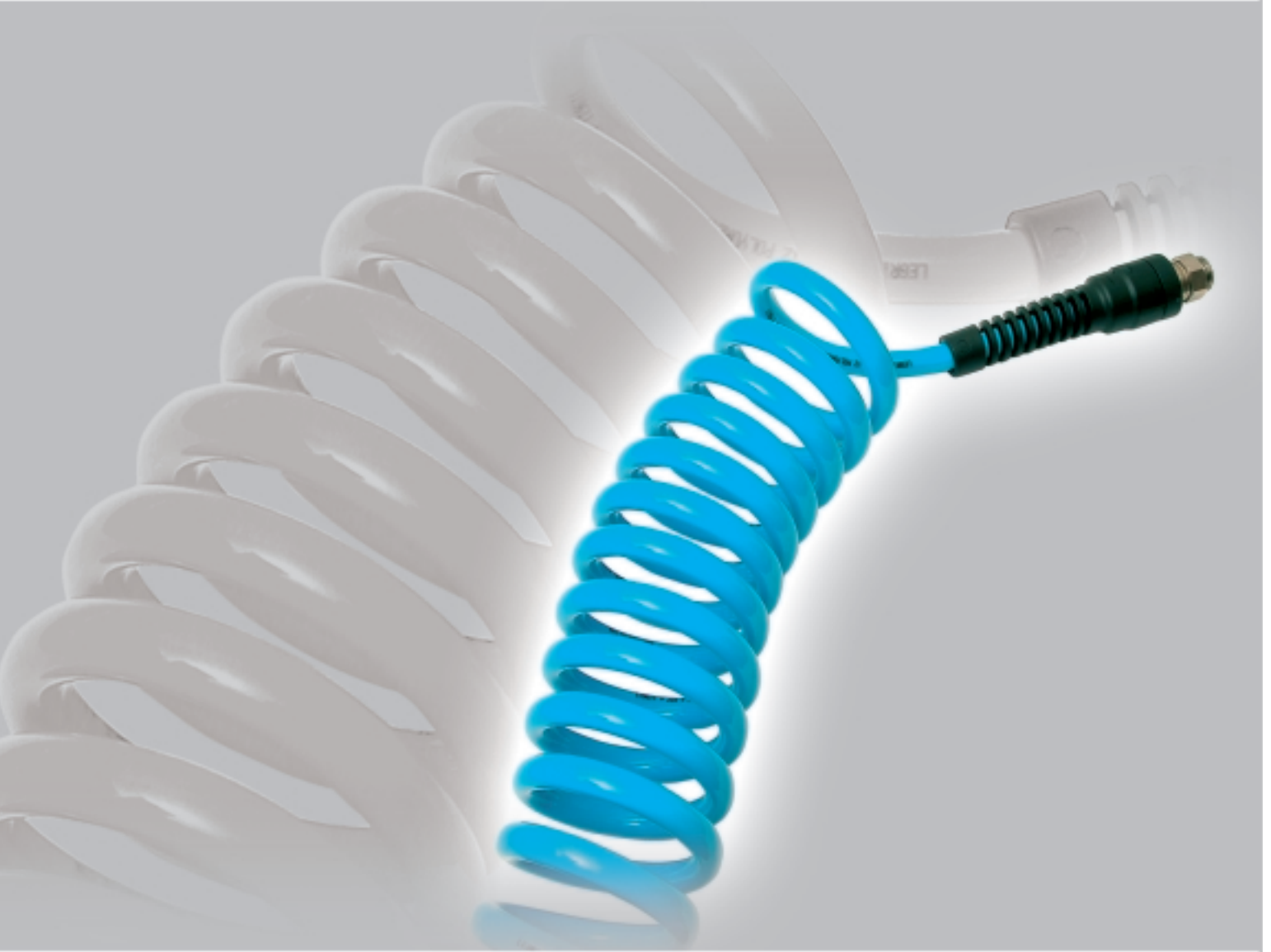


tubing and hoses



tubing and hoses

Legris' policy is to offer its customers a complete range of fittings, and in addition, a full range of tubes and hoses, compatible with the different ranges of fittings featured in this catalog.

nylon air brake tubing



- meets performance of SAE J844 and Federal Regulation DOT FMVSS 106
- for air brake system in transportation applications
- available in 6 colors from 1/8" to 1/2"

multi bundled tubing



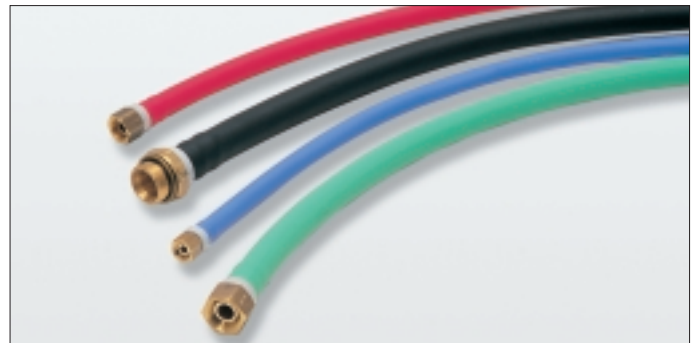
- polyurethane 95 durometer for fractional inch Ø.D.
 - clear PVC jacket
 - 7 and 12 tubes from 1/8" to 1/4"
- nylon for metric Ø.D.
 - black PVC jacket
 - 2, 4, 7 and 12 tubes from 4mm to 8mm

braided PVC hose



- translucent for visual checking of fluids
- food quality to FDA standard
- available in 8mm to 26mm O.D.

push-on hose



- excellent resistance to hydrocarbons, UV, sparks, abrasion and rupture
- ozone resistant
- simple and easy push on installation
- for use with Legris quick-acting barbed fittings

tubepack® packaging



- for polyurethane, nylon, polyethylene and fluoropolymer tubing
- rationalization of tube storage with:
 - better tubing protection
 - location of tube end made easier
 - cleaner storage in warehouse – can store vertically or horizontally
 - material identification made simple – can punch out "P" for Polyamide (nylon) or "U" for Polyurethane
 - date coding (manufactured date) – provides traceability of product
 - sizes:
 - fractional inch – 100ft, 250ft
 - metric – 25m, 100m
 - easy identification of the tube size and visual color identification
 - unreels easily

tubing and hoses

All Legris tube and hose designs conform to international standards. In order to offer global solutions for connection, Legris provides users with a comprehensive range suitable for most applications in order to meet the majority of users' needs.

nylon tubing



- rigid and semi-rigid
- optimum mechanical properties and good chemical resistance
- 7 colors for visual identification of circuits
- close tolerance, available in 1/8" to 1/2" O.D. supplied in 100ft, 500ft, 1000ft rolls, available in 3mm to 16mm O.D., supplied in 25m and 100m rolls

polyurethane tubing



- highly flexible for use in reduced spaces and for small bend radius applications
- optimum mechanical properties and good chemical resistance
- 7 colors available for coding of circuits
- close tolerance, available in 1/8" to 1/2" O.D. supplied in 100ft, 500ft, 1000ft rolls, available in 3mm to 14mm O.D., supplied in 25m and 100m rolls

polyethylene tubing



- good resistance to aggressive and corrosive agents
- FDA approved material (food applications)
- economical solution
- close tolerance, available in 1/8" to 1/2" O.D. supplied in 100ft, 250ft, 500ft rolls, available in 4mm to 12mm O.D., supplied in 25m rolls.

fluoropolymer FEP 140 tubing



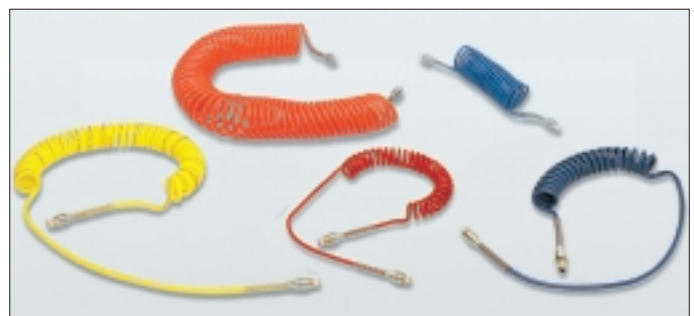
- excellent resistance to aggressive and corrosive agents and high temperatures
- food quality to FDA 177.1550
- close tolerance, available in 1/8" to 1/2" O.D. supplied in 25ft and 100ft rolls, available in 4mm to 12mm O.D., supplied in 5m and 25m rolls

accessories



- clips
- tube cutter
- tube supports
- caps – see page A45

recoil tubing



- nylon and polyurethane
- ages well with excellent flexibility and coil retention
- ready for use and designed with spring protection end fittings
- close tolerance, available in 5 colors and several lengths, 1/4" O.D. and 4mm to 12mm O.D.

tubing

Legris offers a complete range of tubing – in addition to a full range of fittings.

In order to precisely choose the correct tubing for an application, Legris takes into account the many factors necessary: materials, physical properties, chemical and mechanical properties, fluids to be carried, etc.

Legris, therefore, offers several types of tubing:

- nylon tubing
- polyurethane tubing
- polyethylene tubing
- fluoropolymer tubing
- recoil tubing

To find out what tubing is recommended for what fittings, see page 14 in the introduction section at the beginning of this catalog.

Legris tubing

	Nylon	Polyurethane (PU)	Polyethylene (PE)	Fluoropolymer FEP140
Fractional Sizes	1/8" - 1/2"	1/8" - 1/2"	1/8" - 1/2"	1/8" - 1/2"
Metric Sizes	3mm - 16mm	3mm - 14mm	4mm - 12mm	4mm - 12mm
Resistance				
Abrasion	Good	Excellent	Fair	Good
Fungus	Excellent	Good	Good	Excellent
Kinking	Fair	Excellent	Poor	Poor
Moisture	Good	Good (ether)	Good	Excellent
UV Rays	Good	Fair	Poor	Excellent
Compatibility				
Push-to-connect	Excellent	Good (+90 Durometer)	Excellent	Excellent
Compression	Excellent	Poor	Excellent	Excellent
Barbed	Poor	Excellent	Poor	Poor
Criteria				
Clarity	Translucent	Clear	Translucent	Translucent
Colors	Yes	Yes	Yes	Natural
FDA	No	No	Yes (except red)	Yes
Flexibility	Fair	Excellent	Good	Poor

advantages of Legris tubing

nylon:	<ul style="list-style-type: none"> • semi rigid close tolerance • several colors available for coding circuits
polyurethane:	<ul style="list-style-type: none"> • small bending radii in ambient temperatures • ages well • excellent abrasion resistance
polyethylene:	<ul style="list-style-type: none"> • dimensional stability • resists most solvents and chemicals
fluoropolymer FEP 140:	<ul style="list-style-type: none"> • food quality • excellent resistance to corrosive applications
recoil hose:	<ul style="list-style-type: none"> • contracts to original length after multiple use • straight ends equipped with fittings



The 100ft, 250ft, 25m and 100m rolls of tubing are packaged in tubepack®.

The 500ft, 1000ft and bulk rolls of tubing are packaged on reels.

the complete range of tubing and hoses

nylon

fractional inch
Page M6, M7



metric
Page M8, M9



multi-bundled nylon/PVC jacket metric
Page M17



air brake tubing fractional inch
Page M18



polyurethane

95 & 85 durometer fractional inch
Page M10, M11



metric
Page M12, M13



twin tubing metric
Page M12, M13



multi-bundled polyurethane fractional inch
Page M17



polyethylene

fractional inch
Page M14, M15



metric
Page M14, M15



fluoropolymer FEP 140

fractional inch
Page M16



metric
Page M16



recoil

nylon fractional inch
Page M20



nylon metric
Page M20



polyurethane fractional inch
Page M21



polyurethane metric
Page M21



hose

braided PVC hose
Page M22



push-on-hose
Page M23



accessories

brass tube support
Page M18



stainless steel tube support
Page M18



clip strips
Page M19



tube cutter
Page M19



tube & hose cutter
Page M19



hose clip
Page M19



nylon – fractional inch



Legris offers a large range of nylon tubing that meets most requirements for industrial applications. Our nylon tubing provides optimum mechanical properties and has good chemical, humidity, and abrasive resistance.

Some technical tubing applications require a specific quality of Nylon (Nylon 11 or 12). To meet these application requirements, Legris offers both nylon 11 and 12 tubing.

We offer our tubing in 2 packages:

- **tubepack®** for 100ft lengths
- **reels** for 500ft and 1,000ft lengths

Nylon 11= part numbers 1098P and 1099P

Nylon 12= part numbers 1094P (except 3/16" OD is nylon 11)

technical information Nylon 11

raw material:	castor oil
working temperature:	-60° to 200°F
vacuum:	-28" Hg
rockwell hardness:	78R
norm conformity:	UL - 94HB

technical information Nylon 12

raw material:	oil
working temperature:	-4° to 175°F
vacuum:	-28" Hg
shore hardness:	60D
norm conformity:	NFE 49.100

Nylon 11 and Nylon 12 tube tolerance

Flexible nylon tubing is commonly used in connecting pneumatic systems. Here are the tolerances and operating conditions to which it must conform.

O.D. of tube	tolerances on O.D. and I.D.	
1/8" to 1/2"	+0.002	-0.004

Legris tube conforms to these specifications.

Nylon 11 and Nylon 12 fractional inch tubing

O.D. tube in.	I.D. tube in.	R min bend radius (in.)	Working pressure in PSI when using nylon tubing with LF3000 fittings	
			75° F	safety factor
1/8	.093	.375	225	3
5/32	.106	.500	275	3
3/16	.138	.625	225	3
1/4	.180	.875	250	3
5/16	.232	1.25	220	3
3/8	.275	1.50	220	3
1/2	.375	2.00	200	3

nylon – fractional inch

1094P semi-rigid tubing

O.D. tube in	I.D. tube in	R minimum bend radius for tube at ambient temp. in in.	Nylon tube in 100ft rolls – packaged in tubepack®								per 100' roll	
			clear	black	green	red	blue	yellow	gray	orange		
1/8	.093	.375	1094P53 00	1094P53 01								7.06
5/32	.106	.500	1094P04 00	1094P04 01	1094P04 02	1094P04 03	1094P04 04	1094P04 05	1094P04 06	1094P04 07		9.71
3/16	.138	.625	1094P55 00	1094P55 01								13.59
1/4	.180	.875	1094P56 00	1094P56 01	1094P56 02	1094P56 03	1094P56 04	1094P56 05	1094P56 06	1094P56 07		23.83
5/16	.232	1.25	1094P08 00	1094P08 01	1094P08 02	1094P08 03	1094P08 04	1094P08 05	1094P08 06	1094P08 07		35.12
3/8	.275	1.50	1094P60 00	1094P60 01		1094P60 03	1094P60 04					44.30
1/2	.375	2.00	1094P62 00	1094P62 01	1094P62 02	1094P62 03	1094P62 04	1094P62 05	1094P62 06			65.31

1098P semi-rigid tubing

O.D. tube in	I.D. tube in	R minimum bend radius for tube at ambient temp. in in.	Nylon tube in 500ft rolls						per 500' roll
			clear	black	green	red	blue	yellow	
1/8	.093	.375	1098P53 00	1098P53 01					27.18
5/32	.106	.500	1098P04 00	1098P04 01	1098P04 02	1098P04 03	1098P04 04		44.83
1/4	.180	.875	1098P56 00	1098P56 01	1098P56 02	1098P56 03	1098P56 04	1098P56 05	105.12
5/16	.232	1.25	1098P08 00			1098P08 03			147.10
3/8	.275	1.50	1098P60 00	1098P60 01			1098P60 04		189.08
1/2	.375	2.00	1098P62 00	1098P62 01			1098P62 04		228.75

1099P semi-rigid tubing

O.D. tube in	I.D. tube in	R minimum bend radius for tube at ambient temp. in in.	Nylon tube in 1,000ft rolls			per 1,000' roll
			clear	black	blue	
1/8	.093	.375	1099P53 00	1099P53 01		58.42
5/32	.106	.500	1099P04 00	1099P04 01	1099P04 04	95.31
1/4	.180	.875	1099P56 00	1099P56 01	1099P56 04	135.00

Other colors in the sizes and lengths above may be available on special request. Please consult us if you need a color that is not listed.

advantages of Legris nylon tubing

- large range of working temperatures and pressures
- good chemical resistance (see list of fluids at the end of this section – page M24)
- good humidity resistance
- small pressure drop
- constant rigidity, good aging with constant tolerance on O.D.
- good absorption of vibration
- strong abrasion resistance
- 8 colors for easy identification of circuits

close tolerance semi-rigid nylon tubing



Technical characteristics of Legris nylon tubing also depend on the type of connection used.

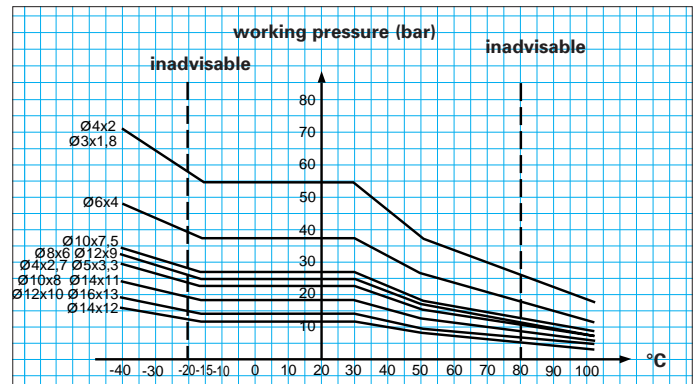
pressure and temperature resistance of Legris nylon tubing

In this graph, each curve represents the acceptable maximum pressure at a given temperature, by diameter. example: semi-rigid nylon tube, Ø14x12, at 20°C, maximum pressure = 10bar

This range includes semi-rigid nylon tubing used in pneumatic systems and rigid tubing ideally suited for centralized lubrication applications requiring high pressure. Legris nylon tubing provides optimum mechanical properties, has good chemical resistance and conforms to NFE 49.100 standard. Semi-rigid tube is shore hardness 60°D and rigid tube, shore hardness 65°D.

O.D. of tube	tolerances on O.D.	Connected to Legris instant fittings, the calibration of Legris nylon tubing ensures perfect sealing .
3 to 5mm	+0.05 -0.08	
6 to 16mm	+0.05 -0.1	

semi-rigid nylon tubing



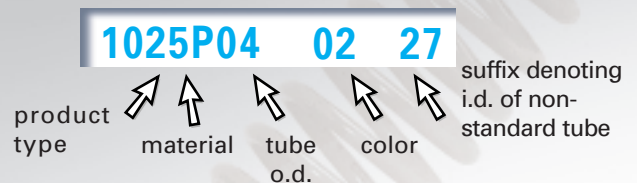
To calculate burst pressure, the value in the above graph should be multiplied x 3.

Product codes

Part numbers have been chosen by a method of mnemonics. Each tube and hose is identified by :

- product type and material
- o.d. of the tube
- color
- i.d. of non-standard tube, if appropriate

example of product code



1025P close tolerance semi-rigid nylon tubing, 25m rolls

O.D. tube mm	I.D. tube mm	R minimum bend radius for tube at ambient temp. in mm	Nylon tube in 25m rolls – packaged in tubepack®							kg for 25m	
			clear	black	green	red	blue	yellow	gray		
3	1.8	8	1025P03 00 18					1025P03 04 18			0.020
4	2	25	1025P04 00	1025P04 01	1025P04 02	1025P04 03	1025P04 04	1025P04 05	1025P04 06		0.318
4	2.7	30	1025P04 00 27	1025P04 01 27	1025P04 02 27	1025P04 03 27	1025P04 04 27	1025P04 05 27	1025P04 06 27		0.254
5	3.3	25	1025P05 00 33	1025P05 01 33			1025P05 04 33				0.420
6	4	35	1025P06 00	1025P06 01	1025P06 02	1025P06 03	1025P06 04	1025P06 05	1025P06 06		0.535
8	6	55	1025P08 00	1025P08 01	1025P08 02	1025P08 03	1025P08 04	1025P08 05	1025P08 06		0.748
10	7.5	75	1025P10 00 75	1025P10 01 75			1025P10 04 75				1.135
10	8	90	1025P10 00	1025P10 01	1025P10 02	1025P10 03	1025P10 04	1025P10 05	1025P10 06		0.989
12	9	75	1025P12 00 09	1025P12 01 09			1025P12 04 09				1.769
12	10	90	1025P12 00	1025P12 01			1025P12 04				1.345
14	11	120	1025P14 00 11	1025P14 01 11			1025P14 04 11				2.226
14	12	100	1025P14 00	1025P14 01			1025P14 04				1.734
16	13	120	1025P16 00 13								2.500

1100P close tolerance semi-rigid nylon tubing, 100m rolls

O.D. tube mm	I.D. tube mm	R minimum bend radius for tube at ambient temp. in mm	Nylon tube in 100m rolls – packaged in tubepack®							kg for 100m	
			clear	black	green	red	blue	yellow	gray		
4	2	25	1100P04 00	1100P04 01	1100P04 02	1100P04 03	1100P04 04	1100P04 05	1100P04 06		1.152
4	2.7	30	1100P04 00 27	1100P04 01 27	1100P04 02 27	1100P04 03 27	1100P04 04 27	1100P04 05 27	1100P04 06 27		0.893
5	3.3	25	1100P05 00 33	1100P05 01 33			1100P05 04 33				1.274
6	4	35	1100P06 00	1100P06 01	1100P06 02	1100P06 03	1100P06 04	1100P06 05	1100P06 06		1.799
8	6	55	1100P08 00	1100P08 01	1100P08 02	1100P08 03	1100P08 04	1100P08 05	1100P08 06		2.898
10	7.5	75	1100P10 00 75	1100P10 01 75			1100P10 04 75				4.400
10	8	90	1100P10 00	1100P10 01	1100P 10 02	1100P10 03	1100P10 04	1100P10 05			3.667
12	9	75	1100P12 00 09	1100P12 01 09			1100P12 04 09				5.600
12	10	90	1100P12 00	1100P12 01			1100P12 04				5.052
14	11	120	1100P14 00 11	1100P14 01 11			1100P14 04 11				5.200
14	12	100	1100P14 00	1100P14 01			1100P14 04				4.800
16	13	120	1100P16 00 13								7.800

Legris nylon tubing is delivered in tubepack® boxes

- easy storage
- protection of tubing against outside aggression
- unreels easily
- quick identification of the tube



polyurethane – fractional inch



Polyurethane 95 durometer tubing is harder than the 85 durometer tubing compound. With an increased wall rigidity, 95 durometer tubing is compatible with LF3000® push-to-connect fittings. Durometer 95 tubing is tough and offers significantly higher working pressures, but is less flexible than lower durometer polyurethane tubing.

Polyurethane 85 durometer tubing is softer than the 95 durometer. The new gripping ring design of the LF3000® fittings has been designed to hold the soft 85 durometer tubing. Legris offers standard and translucent colors in polyurethane.

technical information

	95A durometer	85A durometer
temperature range:	-40° to 165°F	-40° to 165°F
vacuum rating:	28" Hg	28" Hg
vicat softening:	252°F	201-252°F
melting point:	324°F	320°F

95A durometer 85A durometer

moisture absorption 24hr. immersion:	1.5%	1.5-2%
specific gravity:	1.14	1.12
ultimate tensile strength:	5500 psi	5500-7000 psi
ultimate elongation:	475%	475-570%

polyurethane tubing

O.D. of tube	tolerances on O.D. and I.D.	
1/8 to 1/2	+ .005	- .005

Legris tube conforms to these specifications.

95 durometer

O.D. tube in.	I.D. tube in.	R min bend radius at ambient (in.)	Working pressure in PSI when using polyurethane tubing	
			75° F	safety factor
1/8	.06	1/4	233	3
5/32	.094	3/8	176	3
1/4	.160	1/2	148	3
3/8	.250	7/8	147	3
1/2	.320	1-1/8	140	3

85 durometer

1/8	.066	3/16	130	3
5/32	.078	3/8	136	3
1/4	.125	3/8	126	3

ultraviolet light (U.V.)

Under normal conditions, U.V. usually has a minimal effect other than causing a yellow discoloring. More severe exposures to concentrated U.V., such as some types of artificial lighting, may affect polyurethane over a period of time. The easiest solution is to select a black color tubing, which screens many of the deteriorating effects.














advantages of Legris polyurethane tubing

- high flexibility and small bend radius
- large range of working temperatures and pressures
- good chemical resistance (see the list of fluids at the end of this section)
- good humidity resistance
- small pressure drop
- constant rigidity, good aging
- good absorption of vibration
- UV resistant
- 7 colors for easy circuit identification
- fluid identification (clear version)







polyurethane – fractional inch

1094U 95 durometer tubing

O.D. tube in	I.D. tube in	R minimum bend radius for tube at ambient temp. in in.	Flexible polyurethane in 100ft rolls – packaged in tubepack®										per 100' roll		
			 clear	 black	 green	 red	 blue	 yellow	 gray	 translucent green	 translucent red	 translucent blue		 translucent yellow	
1/8	.093	1/4	1094U53R00	1094U53 01		1094U53 03	1094U53 04	1094U53 05							9.88
5/32	.106	3/8	1094U04R00	1094U04 01	1094U04 02	1094U04 03	1094U04 04	1094U04 05	1094U04 06						12.88
1/4	.180	1/2	1094U56R00	1094U56 01	1094U56 02	1094U56 03	1094U56 04	1094U56 05	1094U56 06	1094U56R12	1094U56R13	1094U56R14	1094U56R15		29.48
5/16	.232	5/8	1094U08R00	1094U08 01	1094U08 02	1094U08 03	1094U08 04	1094U08 05		1094U08R12		1094U08R14	1094U08R15		37.95
3/8	.245	7/8	1094U60R00	1094U60 01	1094U60 02	1094U60 03	1094U60 04	1094U60 05	1094U60 06	1094U60R12	1094U60R13	1094U60R14	1094U60R15		58.77
1/2	.320	1 1/8	1094U62R00	1094U62 01	1094U62 02	1094U62 03	1094U62 04	1094U62 05	1094U62 06	1094U62R12	1094U62R13	1094U62R14	1094U62R15		106.78

* 'R' designates polyether tubing







1098U 95 durometer tubing

O.D. tube in	I.D. tube in	R minimum bend radius for tube at ambient temp. in in.	Flexible polyurethane in 500ft rolls						per 500' roll
			 clear	 black	 red	 blue	 yellow	 gray	
1/8	.093	1/4	1098U53R00	1098U53R01					51.89
5/32	.106	3/8	1098U04R00	1098U04R01			1098U04R04		56.48
1/4	.180	1/2	1098U56R00	1098U56R01	1098U56R03		1098U56R04	1098U56R05	58.12
5/16	.232	5/8	1098U08R00	1098U08R01					70.31
3/8	.245	7/8	1098U60R00	1098U60R01			1098U60R04		266.87



* 'R' designates polyether tubing

Note: The 1/8", 5/32", and 1/4" sizes are available in 1000ft rolls in clear, black, and blue. To order a 1000ft roll reference part number 1099U**. Add the tube size and color to complete the part number. Example: 1099U56 01 = 1,000ft, O.D. 1/4", black color

1094U**U 85 durometer tubing

O.D. tube in	I.D. tube in	R minimum bend radius for tube at ambient temp. in in.	Flexible polyurethane in 100ft rolls – packaged in tubepack®						per 500' roll
			 clear	 black	 green	 red	 blue	 yellow	
1/8	.066	3/16	1094U53U00	1094U53U01					9.88
5/32	.078	3/8	1094U04U00	1094U04U01					14.30
1/4	.125	3/8	1094U56U00	1094U56U01	1094U56U02	1094U56U03	1094U56U04	1094U56U05	34.52

1098U**U 85 durometer tubing

O.D. tube in	I.D. tube in	R minimum bend radius for tube at ambient temp. in in.	Flexible polyurethane in 500ft rolls		per 500' roll
			 clear	 black	
1/8	.066	3/16	1098U53U00	1098U53U01	54.75
5/32	.078	3/8	1098U04U00	1098U04U01	61.13
1/4	.125	3/8	1098U56U00	1098U56U01	69.27

polyurethane polyester and polyether benefits

polyester

- recommended for pneumatic applications
- UV resistant
- constant rigidity and good aging

polyether – same benefits as polyester, plus

- excellent resistance to humidity and bacteriological aggressions

close tolerance flexible polyurethane tubing



Technical characteristics of Legris polyurethane tubing also depend on the type of connection used.

pressure and temperature resistance of Legris polyurethane tubing

In the graph below, each curve represents the acceptable maximum pressure at a given temperature, by diameter.
example: polyurethane tube, Ø4 mm, at 20°C, working pressure = 10 bar

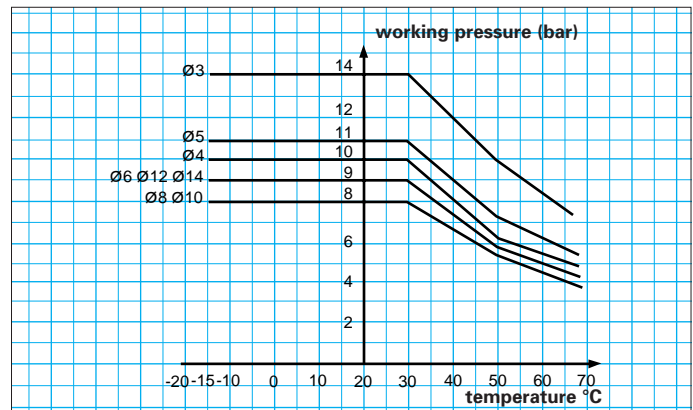
In order to answer the different needs of the user, Legris provides additional ranges of polyurethane tubing:

- polyurethane twin tubing – below
- polyurethane recoil tubing – page M21

The high flexibility of Legris flexible polyurethane tubing allows compact cabling where a small bend radius is required. Legris flexible polyurethane tubing has a shore hardness 52°D and conforms to NFE 49.101 standard.

O.D. of tube	tolerances on O.D.	
3 to 8mm	+0.10	-0.10
10 to 14mm	+0.15	-0.15

Connected to **Legris** instant fittings, the calibration of Legris polyurethane tubing ensures **perfect sealing**.



To calculate burst pressure, the values in the above graph should be multiplied x 3

close tolerance flexible polyurethane twin tubing



Technical characteristics of Legris flexible polyurethane twin tubing are the same as for Legris polyurethane tubing.

Legris flexible polyurethane twin tubing maintains the smooth surface of both tubes when separated and keeps the characteristics of their dimension.








Its use enables:

- swift and easy assembly
- compactness of circuitry
- differentiation of circuits, via two colors

O.D. of tube	tolerances on O.D.	
4 to 8mm	+0.10	-0.10








Connected to **Legris** instant fittings, the calibration of Legris flexible polyurethane twin tubing ensures **optimum sealing**.

1025U flexible polyurethane tubing

O.D. tube mm	I.D. tube mm	R minimum bend radius for tube at ambient temp. in mm	Flexible polyurethane tubing in 25m rolls – packaged in tubepack®							kg for 25m
			 clear	 black	 green	 red	 blue	 yellow	 gray	
3	1.8	8								0.020
4	2.5	10	1025U04R08	1025U04 01	1025U04 02	1025U04 03	1025U04 04	1025U04 05	1025U04 06	0.310
5	3	13	1025U05R08	1025U05 01			1025U05 04			0.522
6	4	15	1025U06R08	1025U06 01	1025U06 02	1025U06 03	1025U06 04	1025U06 05	1025U06 06	0.591
8	5.5	20	1025U08R08	1025U08 01	1025U08 02	1025U08 03	1025U08 04	1025U08 05	1025U08 06	0.971
10	7	25	1025U10R08	1025U10 01	1025U10 02		1025U10 04	1025U10 05	1025U10 06	0.467
12	8	35	1025U12R08	1025U12 01	1025U12 02		1025U12 04	1025U12 05	1025U12 06	2.406
14	9.5	45		1025U14 01 95			1025U14 04 95			2.815

* 'R' designates polyether tubing




1100U flexible polyurethane tubing

O.D. tube mm	I.D. tube mm	R minimum bend radius for tube at ambient temp. in mm	Flexible polyurethane tubing in 100m rolls – packaged in tubepack®							kg for 100m
			 clear	 black	 green	 red	 blue	 yellow	 gray	
4	2.5	10								1.092
5	3	13	1100U04R08	1100U04 01	1100U04 02	1100U04 03	1100U04 04	1100U04 05	1100U04 06	1.605
6	4	15		1100U05 01			1100U05 04			2.064
8	5.5	20	1100U06R08	1100U06 01	1100U06 02	1100U06 03	1100U06 04	1100U06 05	1100U06 06	3.610
10	7	25	1100U08R08	1100U08 01	1100U08 02	1100U08 03	1100U08 04	1100U08 05	1100U08 06	6.105
12	8	35	1100U10R08	1100U10 01			1100U10 04			8.610
14	9.5	45	1100U12R08	1100U12 01			1100U12 04			11.215
				1100U14 01 95			1100U14 04 95			

* 'R' designates polyether tubing

flexible polyurethane twin tubing

1420U flexible polyurethane twin tubing, 25m roll

O.D. tube mm	I.D. tube mm	R minimum bend radius for tube at 20° C in mm	Part numbers for flexible polyurethane twin tubing in 25m rolls – packaged in tubepack®			kg for 25m
						
4	2.5	10	1420U04 11	1420U04 44	1420U04 41	0.620
6	4	15	1420U06 11	1420U06 44	1420U06 41	1.182
8	5.5	20	1420U08 11	1420U08 44	1420U08 41	1.942

Some technical tubing applications require a specific quality of polyurethane tubing (polyether or polyester). Legris offers both polyether PU and polyester PU. We recommend polyether PU tubing for water flow or liquids. For more information, please consult us.

polyethylene – fractional inch and metric



Legris polyethylene tubing provides good resistance to aggressive and corrosive agents. Due to its FDA approved material (Food and Drug Administration), Legris polyethylene tubing can be used for food applications. It has a surface hardness of 44° shore D.

Polyethylene tubing is tasteless and odorless. It is known for its broad resistance to many chemicals and solvents and its impermeability to gases and moisture. Due to stress cracking, barbed fittings are not recommended for PE tubing.

technical information

temperature range:	-40° to 135°F	moisture absorption	
		24hr. immersion:	negligible
vacuum rating:	28" Hg	specific gravity:	0.94
hardness:	44 shore D	ultimate tensile strength:	2250 psi
melting point:	240°F	ultimate elongation:	600%

Natural compound should meet the food and drug administration code of federal regulations, title 21, part 177.1520(c) 2.1 for a resin which may be processed for use involving contact with human food.

NOTE: All color dyes, EXCEPT RED, meet FDA criteria.

tolerance

polyethylene tubing


O.D. of tube	tolerances on O.D. and I.D.	
1/8" to 1/2"	+ .004	- .004
4mm to 12mm	+ .1mm	- .1mm

fractional inch

O.D. tube in.	I.D. tube in.	R min bend radius (in.)	Working pressure in PSI when using polyethylene tubing with LF3000 fittings	
			75° F	safety factor
1/8	.062	1/2	120	3
5/32	.106	1/2	166	3
1/4	.170	1-1/4	173	3
5/16	.187	1-1/2	200	3
3/8	.250	2	192	3
1/2	.375	2-1/2	123	3






metric

O.D. tube mm	I.D. tube mm	R min bend radius (mm)	Working pressure in PSI when using polyethylene tubing with LF3000 fittings	
			75° F	safety factor
4	2.7	12.7	166	3
6	4	31.7	170	3
8	6	38.1	118	3
10	8	50.8	90	3
12	9	63.5	113	3







 = suitable for food applications

polyethylene – fractional inch and metric




1094Y low density polyethylene tubing

O.D. tube in	I.D. tube in	R minimum bend radius for tube at ambient temp. in in.	Polyethylene tube in 100ft rolls – packaged in tubepack®					for 100'
			 clear	 black	 green	 red	 blue	
1/8	.062	1/2	1094Y53 00	1094Y53 01				8.61
5/32	.106	1/2	1094Y04 00	1094Y04 01				9.63
1/4	.170	1 1/4	1094Y56 00	1094Y56 01	1094Y56 02	1094Y56 03	1094Y56 04	19.98
3/8	.250	2	1094Y60 00	1094Y60 01				45.89
1/2	.375	2 1/2	1094Y62 00	1094Y62 01				63.54




1096Y low density polyethylene tubing

O.D. tube in	I.D. tube in	R minimum bend radius for tube at ambient temp. in in.	Polyethylene tube in 250ft rolls – packaged in tubepack®						for 250'
			 clear	 black	 green	 red	 blue	 yellow	
1/8	.062	1/2	1096Y53 00	1096Y53 01	1096Y53 02	1096Y53 03	1096Y53 04	1096Y53 05	21.53
5/32	.106	1/2	1096Y04 00	1096Y04 01	1096Y04 02	1096Y04 03	1096Y04 04	1096Y04 05	24.07
1/4	.170	1 1/4	1096Y56 00	1096Y56 01	1096Y56 02	1096Y56 03	1096Y56 04	1096Y56 05	49.95
5/16	.187	1 1/2	1096Y08 00	1096Y08 01	1096Y08 02	1096Y08 03	1096Y08 04	1096Y08 05	94.60
3/8	.250	2	1096Y60 00	1096Y60 01	1096Y60 02	1096Y60 03	1096Y60 04	1096Y60 05	114.73
1/2	.375	2 1/2	1096Y62 00	1096Y62 01	1096Y62 02	1096Y62 03	1096Y62 04	1096Y62 05	158.85

1098Y low density polyethylene tubing

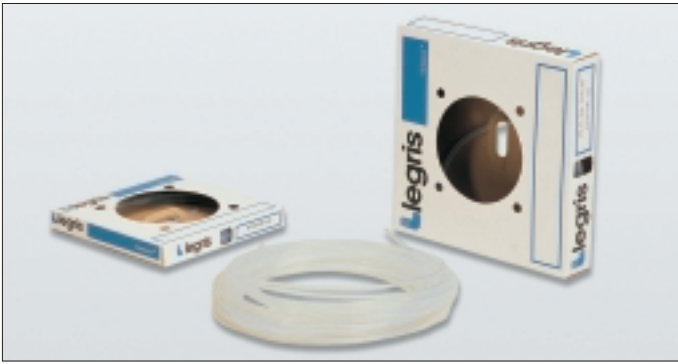
O.D. tube in	I.D. tube in	R minimum bend radius for tube at ambient temp. in in.	Polyethylene tube in 500ft rolls			for 500'
			 clear	 black	 blue	
1/4	.170	1 1/4	1098Y56 00	1098Y56 01		102.90
3/8	.250	2	1098Y60 00	1098Y60 01	1098Y60 04	192.20
1/2	.375	2 1/2	1098Y62 00	1098Y62 01		320.70

1025Y low density polyethylene tubing

O.D. tube mm	I.D. tube mm	R minimum bend radius for tube at ambient temp. in mm	Polyethylene tube in 25m rolls – packaged in tubepack®			for 25m
			 clear	 black	 blue	
4	2.7	12.7	1025Y04 00	1025Y04 01	1025Y04 04	0.310
6	4	31.7	1025Y06 00	1025Y06 01	1025Y06 04	0.591
8	6	38.1	1025Y08 00	1025Y08 01	1025Y08 04	0.971
10	8	50.8	1025Y10 00	1025Y10 01	1025Y10 04	0.467
12	9	63.5	1025Y12 00	1025Y12 01	1025Y12 04	2.406

Other colors in the sizes and lengths above may be available on special request. Please consult us if you need a color that is not listed


close tolerance fluoropolymer FEP 140 tube



Technical characteristics of Legris fluoropolymer FEP 140 tube also depend on the type of connection used.

pressure and temperature resistance of Legris fluoropolymer FEP 140 tube

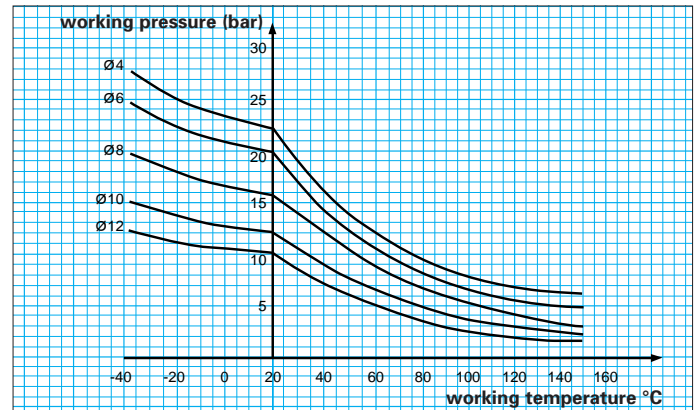
In the graph, each curve represents the acceptable maximum pressure at a given temperature, by diameter.
example: polyethylene tube, O.D. 6 , at 20°C, maximum pressure = 20 bar

 = suitable for food applications

Legris fluoropolymer FEP 140 tube is of food quality and provides excellent resistance to aggressive and corrosive agents and to high temperatures. It has a surface hardness of 55° shore D.

O.D. of tube	Tolerances on O.D.	
4mm	+0.05	-0.05
6 to 10mm	+0.07	-0.07
12mm	+0.10	-0.10





Connected to Legris instant fittings, the calibration of Legris fluoropolymer FEP 140 tube ensures **perfect sealing**.



To calculate burst pressure, the values in the above graph should be multiplied x 3. (For flow chart information on fractional inch, please consult us.)





1092T-1094T fluoropolymer FEP 140 tube – fractional inch

O.D. tube in	I.D. tube in	R minimum bend radius in in.
1/8	.06	1.57
1/4	.17	3.15
3/8	.30	4.33
1/2	.42	7.48

in 25ft rolls		in 100ft rolls	
 clear	per 25'	 clear	per 100'
1092T53 00	5.92	1094T53 00	25.44
1092T56 00	10.88	1094T56 00	43.68
1092T60 00	18.40	1094T60 00	73.60
1092T62 00	20.80	1094T62 00	83.20

1005T-1025T fluoropolymer FEP 140 tube – metric

O.D. tube mm	I.D. tube mm	R minimum bend radius for tube at 20° C in mm
4	2.5	40
6	4	50
8	6	70
10	8	120
12	10	180

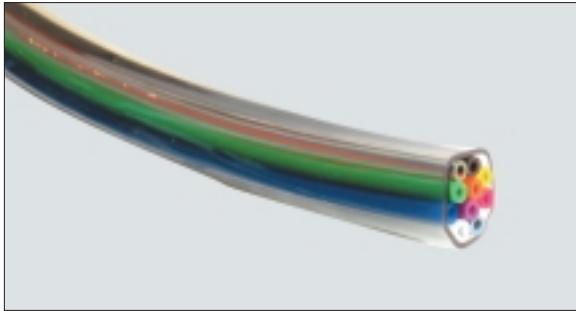
in 5m rolls		in 25m rolls	
 clear	per 5m	 clear	per 25m
1005T04 00 25	0.155	1025T04 00 25	0.506
1005T06 00	0.250	1025T06 00	1.027
1005T08 00	0.385	1025T08 00	1.431
1005T10 00	0.524	1025T10 00	1.693
1005T12 00	0.547	1025T12 00	1.913

main advantages of Legris fluoropolymer FEP 140 tube

- excellent resistance to chemicals and high temperature
- FDA approved (food quality)
- good abrasion resistance
- excellent UV resistance
- delivered in tubepack® boxes for protection

multi bundled tubing

polyurethane 95 – fractional inch



# or tubes	7	colors: blue, yellow, clear, red, black, green, gray
# or tubes	12	colors: blue, yellow, clear, red, black, green, gray, orange, purple, white, translucent blue, translucent red

The Legris multi bundled tubing is an excellent solution to neatly color code a pneumatic system. Jacketed with clear flexible PVC, the polyurethane 95 durometer tubing can be connected with push-to-connect fittings or multi-connectors.

1093U**M/1094U**M polyurethane multi bundled tubing

O.D. tube in	I.D. tube in	# of tubes	30 ft rolls	100 ft rolls
1/8	.066	7	1093U53 00M07	1094U53 00M07
5/32	.093	7	1093U04 00M07	1094U04 00M07
1/4	.160	7	1093U56 00M07	1094U56 00M07
1/8	.066	12	1093U53 00M12	1094U53 00M12
5/32	.093	12	1093U04 00M12	1094U04 00M12
1/4	.160	12	1093U56 00M12	1094U56 00M12

Packaged in plastic bags.

Please refer to section A for further details of Legris LF 3000 Multi-Connectors.

close tolerance semi-rigid nylon – metric



Legris semi-rigid nylon multi bundled tubing is suited to pneumatic circuits submitted to external aggression. Its PVC jacket is resistant to abrasion, fire, caustic fluids, oils, alcohol etc. The special design jacket and spiral assembly ensure a small bend radius for compact and flexible cabling. For fast identification of circuits, tubes are numbered from 1 to 12 and 6 colors are available.

Technical characteristics of Legris nylon multi bundled tubing are the same as for Legris semi-rigid nylon tubing.

Please refer to page M8.

o.d. of tube	tolerances on o.d.	
4 mm	+0.05	-0.08
6 to 8 mm	+0.05	-0.1

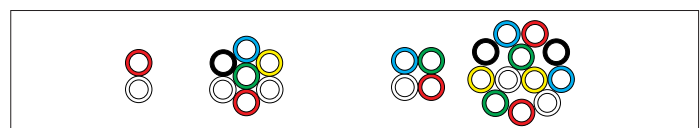
Connected to Legris instant fittings, the calibration of Legris nylon multitube ensures optimum sealing.

1050P-1010P semi-rigid nylon multi bundled tubing

o.d. PVC jacket (mm)	o.d. x i.d. semi-rigid nylon (mm)	R minimum bend radius at 70° F (mm)	number of tubes	supplied in 50 meter rolls
11.2	4x2.7	20	2	1050P04 00M02
13.5	4x2.7	35	4	1050P04 00M04
16	4x2.7	45	7	1050P04 00M07
20.5	4x2.7	55	12	1050P04 00M12
16	6x4	45	2	1050P06 00M02
18.5	6x4	55	4	1050P06 00M04
22	6x4	60	7	1050P06 00M07
19.2	8x6	45	2	1050P08 00M02

o.d. PVC jacket (mm)	o.d. x i.d. semi-rigid nylon (mm)	R minimum bend radius at 70° F (mm)	number of tubes	supplied in 10 meter rolls
13.5	4x2.7	35	4	1010P04 00M04
16	4x2.7	45	7	1010P04 00M07
18.5	6x4	55	4	1010P06 00M04
22	6x4	60	7	1010P06 00M07
19.2	8x6	45	2	1010P08 00M02

color choice



Please refer to section A for further details of Legris LF 3000 Multi-Connectors.

air brake tubing — nylon



Legris offers a full range of **nylon air brake tubing Type A and Type B**. Connected to the air brake system, it is ideal for use in the transportation and instrumentation markets and pneumatic accessories.

Designed to replace rubber and metal tubing, our tubing can save as much as 75% in weight over metal tubing. It offers superior resistance to oil, grease, gasoline, fuel, salts, moisture and chemicals.

Legris air brake tubing meets performance requirements of SAE J844 and Federal Regulation DOT FMVSS 106.

O.D. tube	type	description
*1/8" to 5/16"	A	non-reinforced tubing
3/8" to 1/2"	B	reinforced tubing

*1/8" does not comply with DOT FMVSS 106

1094P air brake nylon tubing

O.D. tube in	I.D. tube in	min. bend radius in	min. burst PSI	nylon tubing in 100ft rolls – packaged in tubepack®						oz
				black	green	red	blue	yellow	orange	
1/8	.102	3/8	1000	1094P53 01DT						7.77
5/32	.124	1	1000	1094P04 01DT						10.68
3/16	.153	1	1000	1094P55 01DT						14.95
1/4	.210	1	1200	1094P56 01DT	1094P56 02DT	1094P56 03DT	1094P56 04DT	1094P56 05DT	1094P56 07DT	26.21
3/8	.313	1.5	1400	1094P60 01DT	1094P60 02DT	1094P60 03DT	1094P60 04DT	1094P60 05DT	1094P60 07DT	48.73
1/2	.438	2	950	1094P62 01DT	1094P62 02DT	1094P62 03DT	1094P62 04DT	1094P62 05DT	1094P62 07DT	71.84

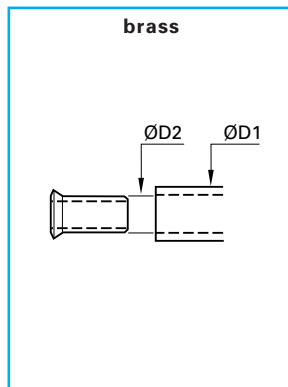
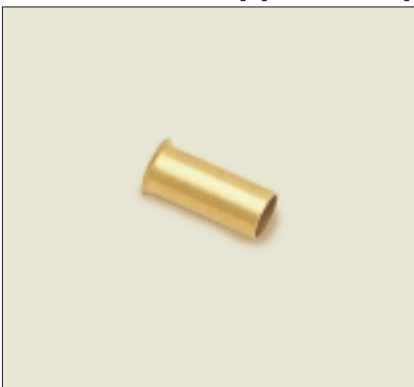
We recommend the use of the Legris air brake tubing with:

- Legris DOT push-to-connect fittings for vehicle applications. Refer to section F.
- Legris SAE push-to-connect fittings for vehicle applications. Refer to section F.



accessories

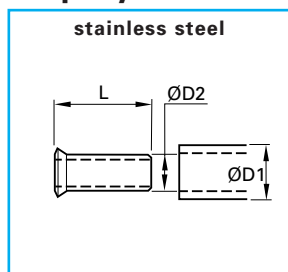
0127 tube support for plastic tube



ØD1 mm	ØD2 mm			kg
12	8	0127 12 08		.002
4	2	0127 04 00		.001
4	2.7	0127 04 27		.001
5	3	0127 05 03		.001
5	3.3	0127 05 00		.001
6	4	0127 06 00		.001
8	5.5	0127 08 55		.001
8	6	0127 08 00		.001
10	7	0127 10 07		.002
10	7.5	0127 10 75		.002
10	8	0127 10 00		.002
12	8	0127 12 08		.002
12	9	0127 12 09		.002
12	10	0127 12 00		.002
14	11	0127 14 11		.003
14	12	0127 14 00		.003
15	12	0127 15 12		.003
16	13	0127 16 13		.003
18	14	0127 18 14		.004
20	15	0127 20 15		.004
22	16	0127 22 16		.005
25	19	0127 25 19		.005

This tube support guarantees good gripping, at high temperatures and pressures, by preventing collapsing of the tube. For fractional inch tube support see page G8.

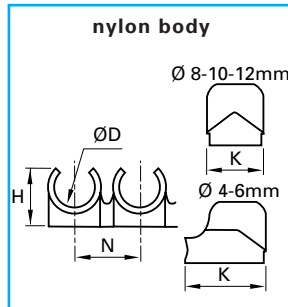
1827 tube support for fluoropolymer tubing



ØD1 mm	ØD2 mm		L in	kg
6	4	1827 06 00	11.5	.001
8	6	1827 08 00	14	.001
10	8	1827 10 00	18	.002
12	10	1827 12 00	18	.002
16	14	1827 16 00	18	.003

This tube support is necessary when using fluoropolymer tube at all temperatures compatible with the fitting/tube assembly.

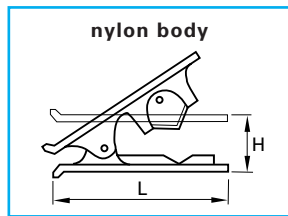
Clip clip strips for tubing and fittings



ØD	ØLF3000 body size		H mm	K mm	N mm	Number of clips per strip	kg
5/32, 4mm		Clip 04 00	9	13.5	10.5	8	.008
1/4, 3/16, 6mm		Clip 06 00	10.5	13	10.5	8	.009
5/16, 8mm	5/32, 4mm	Clip 08 00	12.5	10.5	12	7	.009
3/8, 10mm	1/4, 6mm	Clip 10 00	14	12	15	6	.010
1/2, 12mm		Clip 12 00	16.5	14	16.5	5	.011
14mm	5/16, 8mm	Clip 14 00	18	16	20.5	4	.011

Legris clips can be used to mount both tubing and fittings. To order clips for tubing use the column "O.D. tube". To order clips for mounting a fitting order by the "O.D. body size". Clip strips are packaged in quantities of 5, but ordered by individual strip. They come complete with screws of 9.5mm length.

3000 71 00 tube cutter



	H in	L in	oz
3000 71 00	.98	3.11	1.09

This tool will cut all resilient plastic tube (e.g. nylon, teflon, polyurethane, braided PVC, soft rubber, etc.) from 1/8" to 1/2" and 4mm to 14mm diameter inclusive. It is designed to give a clean cut at right angles to the tube axis. A spring maintains the cutter in the closed position.

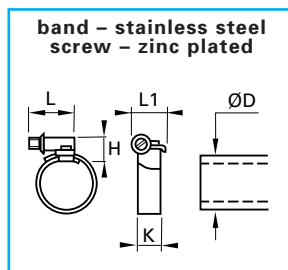
3000 71 11 tube cutter for tubing & push-on hose



	oz
3000 71 11	8.01

For hoses up to 1" (25mm)
spare blade: 3000 71 11 05

0697 clip for PVC braided tube



ØD mm		H mm	K mm	L mm	L1 mm	kg
8	0697 00 01	7	5	12	7	.003
10	0697 00 02	12	9	21	13	.010
11	0697 00 02	12	9	21	13	.010
13	0697 00 02	12	9	21	13	.010
15	0697 00 03	12	9	24	13	.013
18	0697 00 03	12	9	24	13	.013
21	0697 00 04	12	9	24	13	.014
26	0697 00 05	12	9	24	13	.014

nylon recoil






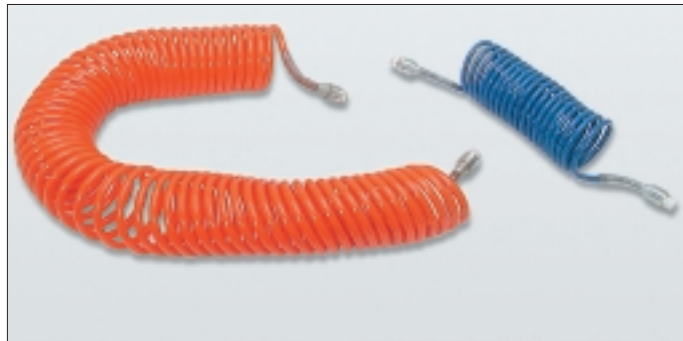
Legris nylon recoil tubing ensures that the coil will continue to contract after multiple use. Assembled with male connector 1/4" BSP taper fittings, it is ready for immediate use. Protection springs are fitted to prevent the ends of the tubing from becoming damaged.

service pressure at variable temperatures

+5°F to 90°F 200 psi	+90°F to 120°F 160 psi	+120°F to 160°F 120 psi
-------------------------	---------------------------	----------------------------

1480P fractional inch tube with 1/4" NPT end fittings

O.D. tube in	I.D. tube in	 yellow	 orange	contracted length in.	working length feet	linear feet per coil	ØD of coil in.	
1/4	3/16	1480P56 05 14	1480P56 07 14	3	4	6	2-1/8	4.16
1/4	3/16	1481P56 05 14	1481P56 07 14	6	8	12	2-1/8	5.12
1/4	3/16	1482P56 05 14	1482P56 07 14	9	12	18	2-1/8	6.40
1/4	3/16	1483P56 05 14	1483P56 07 14	12	16	24	2-1/8	7.36
1/4	3/16	1484P56 05 14	1484P56 07 14	24	32	48	2-1/8	9.28









materials of construction

- tubing: nylon
- fitting: nickel-plated brass
- tube insert: brass
- spring guard: zinc treated steel







O.D. of tube	tolerances on O.D.
6 to 8mm	+0.05 -0.10

Technical characteristics of Legris nylon recoil tubing also depend on the type of connection used.







1470P metric tube with 1/4" BSPT end fittings

O.D. tube mm	I.D. tube mm	2m recoil tubing  service length		total closed length 	ØD of coil 	
		 blue	 orange			
6	4	1470P06 04 13	1470P06 07 13	120mm	60mm	.143
8	6	1470P08 04 13	1470P08 07 13	160mm	70mm	.174

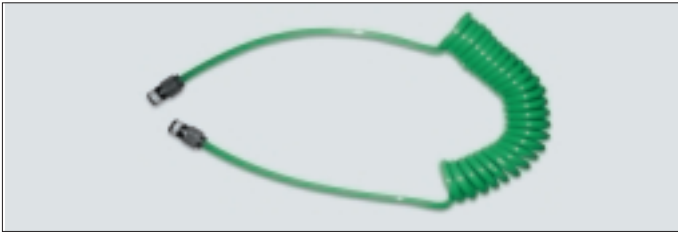
1471P metric tube with 1/4" BSPT end fittings

O.D. tube mm	I.D. tube mm	4m recoil tubing  service length		total closed length 	ØD of coil 	
		 blue	 orange			
6	4	1471P06 04 13	1471P06 07 13	240mm	60mm	.199
8	6	1471P08 04 13	1471P08 07 13	320mm	70mm	.249

1472P metric tube with 1/4" BSPT end fittings




O.D. tube mm	I.D. tube mm	6m recoil tubing  service length		total closed length 	ØD of coil 	
		 blue	 orange			
6	4	1472P06 04 13	1472P06 07 13	360mm	60mm	.260
8	6	1472P08 04 13	1472P08 07 13	480mm	70mm	.329

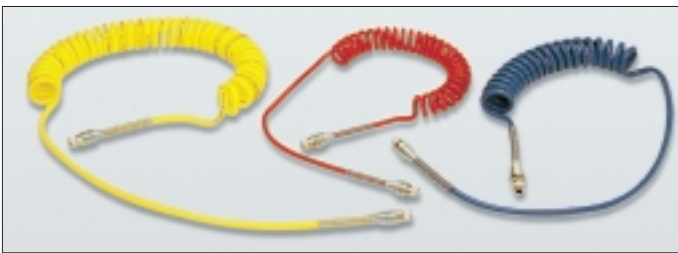
polyurethane recoil



Legris polyurethane recoil tubing is perfectly suited for installations requiring flexibility within a reduced space, due to its small coil diameters. Straightened extremities and good resistance to shocks and abrasion enable safe and easy manipulation of pneumatic machinery.

1470U fractional inch tube with 1/4" NPT end fittings

O.D. tube in	I.D. tube in	 neon green	contracted length in.	working length ft.	ØD of coil in. 	assembly information	
1/4	3/16	1481U56 22 14	6	8	1-1/2	supplied with 1/4" male NPT swivel end fittings	3.50
1/4	3/16	1481U56 22	6	8	1-1/2	supplied without 1/4" male NPT swivel end fittings	3.00










temperature: up to 160°F
working pressure: up to 145°F
tubing: polyurethane
fitting: nickel-plated brass
tube insert: brass
spring guard: zinc








O.D. of tube	tolerances on O.D.	
4 to 8mm	+0.10	-0.10
12mm	+0.15	-0.15

Technical characteristics of Legris polyurethane recoil tubing also depend on the type of connection used.








1470U metric tube with BSPT end fittings

O.D. tube mm	I.D. tube mm	Ø.D. BSPT thread	Polyurethane recoil tubing, 2m long 			total closed length 	length of long straight section in mm	length of short straight section in mm	ØD of coil 	
			 red	 blue	 yellow					
4	2.5	R1/8	1470U04 03 10	1470U04 04 10	1470U04 05 10	595mm	300	100	24mm	.060
6	4	R1/4	1470U06 03 13	1470U06 04 13	1470U06 05 13	630mm	300	100	32mm	.120
8	5	R1/4	1470U08 03 13	1470U08 04 13	1470U08 05 13	780mm	500	100	42mm	.160
10	7	R1/4	1470U10 03 13	1470U10 04 13	1470U10 05 13	780mm	500	100	62mm	.200
12	8	R3/8	1470U12 03 17	1470U12 04 17	1470U12 05 17	780mm	500	100	65mm	.220

1471U metric tube with BSPT end fittings

O.D. tube mm	I.D. tube mm	Ø.D. BSPT thread	Polyurethane recoil tubing, 4m long 			total closed length 	length of long straight section in mm	length of short straight section in mm	ØD of coil 	
			 red	 blue	 yellow					
4	2.5	R1/8	1471U04 03 10	1471U04 04 10	1471U04 05 10	785mm	300	100	24mm	.100
6	4	R1/4	1471U06 03 13	1471U06 04 13	1471U06 05 13	850mm	300	100	32mm	.160
8	5	R1/4	1471U08 03 13	1471U08 04 13	1471U08 05 13	1000mm	500	100	42mm	.200
10	7	R1/4	1471U10 03 13	1471U10 04 13	1471U10 05 13	1000mm	500	100	62mm	.230
12	8	R3/8	1471U12 03 17	1471U12 04 17	1471U12 05 17	990mm	500	100	65mm	.260

1472U metric tube with BSPT end fittings

O.D. tube mm	I.D. tube mm	Ø.D. BSPT thread	Polyurethane recoil tubing, 6m long 			total closed length 	length of long straight section in mm	length of short straight section in mm	ØD of coil 	
			 red	 blue	 yellow					
8	5	R1/4	1472U08 03 13	1472U08 04 13	1472U08 05 13	1230mm	500	100	42mm	.280
10	7	R1/4	1472U10 03 13	1472U10 04 13	1472U10 05 13	1140mm	500	100	62mm	.300
12	8	R3/8	1472U12 03 17	1472U12 04 17	1472U12 05 17	1190mm	500	100	65mm	.310

braided PVC hose



Technical characteristics of Legris braided PVC hose also depend on the type of connection used.

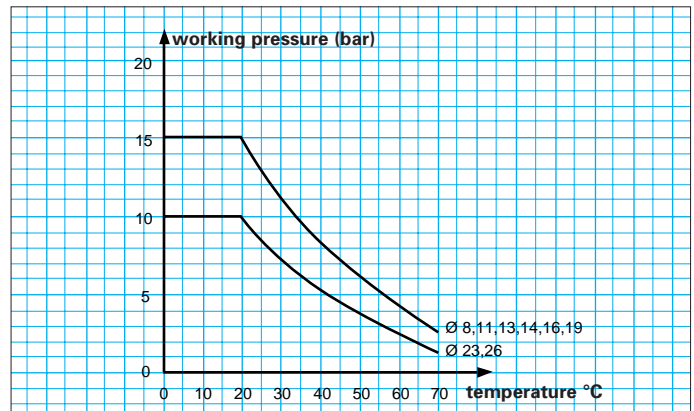
pressure and temperature resistance of Legris braided PVC hose

In the adjacent graph, each curve represents the acceptable maximum pressure at a given temperature, by diameter. example: braided PVC hose, O.D. 13 , at 20°C maximum pressure = 15 bar

Translucent Legris braided PVC hose comprises a polyester fiber mesh sandwiched between two layers of polymer. It has a wide variety of applications. It is food quality and is suitable for use with milk, beer, water, wine, etc.



It is translucent which allows a visual check on fluid flow, cleanliness inside the tube, airlocks etc.

Braided PVC hose can be used with barbed adapters, see page H16.



To calculate burst pressure, the values in the above graph should be multiplied x 3

1025V-1050V braided PVC hose, 25m and 50m rolls

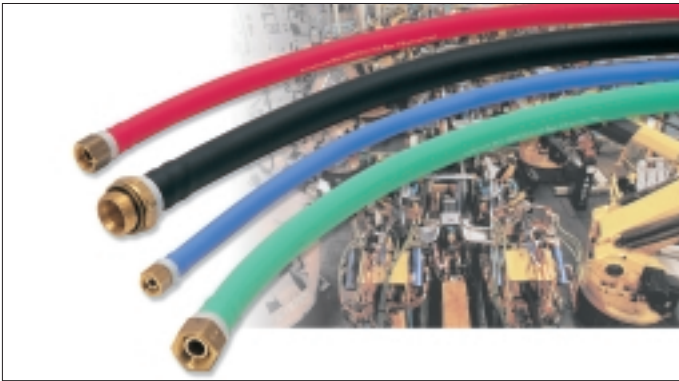
I.D. tube mm	O.D. tube mm	R minimum bend radius for tube at 20° C (in mm)	Braided PVC hose in 25m rolls		Braided PVC hose in 50m rolls	
			 clear	kg for 25m	 clear	kg for 50m
4	8	10	1025V08 00 04	1.260	1050V08 00 04	2.500
6	11	12	1025V11 00 06	2.100	1050V11 00 06	4.200
7	13	14	1025V13 00 07	2.820	1050V13 00 07	5.600
8	14	16	1025V14 00 08	3.065	1050V14 00 08	6.000
10	16	25	1025V16 00 10	3.200	1050V16 00 10	6.400
12	18	30	1025V18 00 12	4.120	1050V18 00 12	8.250
15	23	40	1025V23 00 15	6.300	1050V23 00 15	12.600
19	26	60	1025V26 00 19	7.800	1050V26 00 19	15.600

We recommend the use of hose clip 0697 (page M17) when PVC braided hose is connected to a barbed fitting.

advantages of Legris braided PVC hose

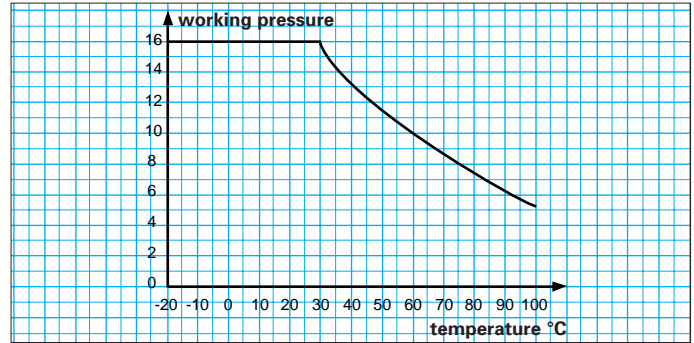
- food quality
- translucent for visual checking of fluid flow
- flexibility
- good aging
- numerous applications

push-on hose



Legris push-on hose is constructed with NBR nitrile rubber reinforced with a textile braid on both inner and outer layers. It is designed for automobile process equipment (CNOMO E07.21115N) both for cooling circuits and for many general pneumatic installations. Used with Legris **quick barbed fittings**, (see page G29) this new range of hose provides both reliability of push-on technology and simplicity of installation.

temperature and pressure resistance of Legris push-on hose



use with water: maximum temperature: 100°C
use with air: maximum temperature: 70°C

For correct connection, push the tube firmly against the shoulder of the fitting. Dismantling should be done by cutting the tube with a knife on the barbed side of the fitting.

technical conditions of use

• installation / dismantling

Assembly is simple and easy and no collar, no additive (grease, oil...etc) nor preparation time is required.

1040H push-on hose

I.D. hose	O.D. hose mm	R min. bend radius at 20°C (mm)	Max. working pressure in bar at 20°C	burst pressure in bar at 20°C
1/4, 6.3mm	13	60	16	60
3/8, 9.5mm	16	70	16	60
1/2, 12.7mm	19	120	16	60
5/8, 15.9mm	23	140	16	60
3/4, 19.1mm	27	170	16	60

push-on hose, in 40m (131.23ft) rolls

black	green	red	blue
1040H56 01	1040H56 02	1040H56 03	1040H56 04
1040H60 01	1040H60 02	1040H60 03	1040H60 04
1040H62 01	1040H62 02	1040H62 03	1040H62 04
1040H66 01	1040H66 02	1040H66 03	1040H66 04
1040H69 01	1040H69 02	1040H69 03	1040H69 04

1080H push-on hose

I.D. hose	O.D. hose mm	R min. bend radius at 20°C (mm)	Max. working pressure in bar at 20°C	burst pressure in bar at 20°C
5/8, 15.9mm	23	140	16	60
3/4, 19.1mm	27	170	16	60

push-on hose, in 80m (262.47ft) rolls

black	green	red	blue
1080H66 01	1080H66 02	1080H66 03	1080H66 04
1080H69 01	1080H69 02	1080H69 03	1080H69 04

1100H push-on hose

I.D. hose	O.D. hose mm	R min. bend radius at 20°C (mm)	Max. working pressure in bar at 20°C	burst pressure in bar at 20°C
1/4, 6.3mm	13	60	16	60
3/8, 9.5mm	16	70	16	60
1/2, 12.7mm	19	120	16	60

push-on hose, in 100m (328.08ft) rolls

black	green	red	blue
1100H56 01	1100H56 02	1100H56 03	1100H56 04
1100H60 01	1100H60 02	1100H60 03	1100H60 04
1100H62 01	1100H62 02	1100H62 03	1100H62 04

main advantages of Legris push-on hose

- reliable technology, easy installation
- ozone resistant:
 - external resistance conforms to NFT 46019
 - internal resistance conforms to NFT 47252
- guaranteed silicone free
- excellent resistance to hydrocarbons, UV, welding sparks and abrasion
- available in 4 standard colors
- packed on drums for easy handling

tubing

application table for Legris nylon tubing

1 recommended 2 satisfactory 3 inappropriate

	at 70°F		at 70°F	
Acetaldehyde	1	Kerosene	1	
Acetone	1	Methane	1	
Acetylene	1	Methyl Acetate	1	
Benzene	1	Methyl Alcohol (pure)	1	
Bleach	2	Methyl Bromide	1	
Bromine	3	Methyl Chloride	1	
Butane	1	Methyl Ethyl Ketone	1	
Butyl Acetate	1	Methyl Isobutyl Ketone	1	
Butylic Alcohol	1	Oxygen	1	
Calcium Chloride	1	Ozone	2	
Carbon Tetrachloride	3	Perchlorate Ethylene	2	
Chloride	3	Phenols	3	
Chromic Acid 10%	3	Phosphoric Acid 50%	1	
Citric Acid	1	Potash 50%	1	
Concentrated Ammonia	1	Potassium Nitrate	1	
Copper Sulfate	1	Potassium Sulphate	1	
Cutting Oils	1	Propane	1	
Cyclohexane	1	Soda 50%	1	
Cyclohexanone	1	Sodium Carbonate	1	
Diesel Oil	1	Sodium Chloride	1	
Ethyl Acetate	1	Sulphuric Acid 10%	1	
Ethyl Alcohol (pure)	1	Sulphurous Anhydride	2	
Ethyleneoxide	1	Supergrade Petrol	1	
Freon 12-22	1	Toluene	1	
Formalin	1	Tributylphosphate	1	
Gaseous Ammonia	1	Trichlorethane	1	
Glucose	1	Trichlorethylene	2	
Hydrochloric Acid 10%	1	Water	1	
Hydrogen	1	Xylem	1	
Hydrogen Peroxide	1	Zinc Chloride	1	

tubing

application table for Legris polyurethane tubing

1 recommended 2 satisfactory 3 inappropriate

	Crystal tubing Polyether base at 70°F	Other colors Polyester base at 70°F
Acetic Acid	3	1
Acetone	1	3
Ammonia	1	1
Ammonium Chloride 10%	1	1
ASTM – Fuel oil A	1	1
ASTM – Fuel oil B	1	2
ASTM – Fuel oil C	1	2
ASTM – Oil 1	1	1
ASTM – Oil 2	1	1
ASTM – Oil 3	1	1
Benzene	3	3
Butane	1	1
Butyl Acetate	2	3
Butyl Alcohol	2	2
Carbon Tetrachloride	2	3
Caustic Soda	2	1
Chloroform	3	3
Chromic Acid 3n	3	3
Cyclohexanone	3	3
Diesel Oil	1	1
Distilled Water	1	2
Ethanol	2	2
Ethyl Acetate	2	2
Freon 12-22	2	2
Glycol Without H2O	1	1
Hexachloride	1	2
Hydrochloric Acid 3n	3	1
Hydrogen Peroxide 3%	1	1
Kerosene	1	1
Magnesium Chloride 10% and 30%	2	1
Methane	1	1
Methanol	3	1
Methyl Acetate	2	2
Methyl Ethyl Ketone	3	3
Methyl Glycol	3	3
Nitric Acid 3n	3	3
Ozone	1	1
Paraffin Oil	1	1
Perchlorate Ethylene	2	2
Phosphoric Acid 3n	3	2
Potassium Chloride 10% and 40%	2	1
Potassium Manganate 5%	2	3
Propane	1	1
Sea Water	2	1
Sodium Chloride	2	1
Sulphuric Acid 3n maxi 10%	3	1
Sulphuric Acid 13 PH	3	2
Tetrachloroethylene	3	3
Toluene	2	2
Trichlorethylene	3	3
Xylem	2	2