



acetamide
 acetic acid 10%
 acetic acid 100%
 acetic acid 3%
 acetic acid ethyl ester (ethyl acetates)
 acetic anhydride
 acetone
 acetylacetone
 acetylene
 acetylsalicylic acid (Aspirin)
 acids, generally (see exact media)
 acrylic acid ethlester
 acrylic esters (ethyl acrylate)
 acrylonitrile
 adipic acid, aqueous
 air, containing oil
 air, dry
 air, wet water vapour
 alcohols, generally (see exact media)
 aliphatics, generally (see exact media)
 alkalis, generally (see exact media)
 allyl alcohol
 allyl chloride
 alum, aqueous
 aluminium acetates
 aluminium chloride, 10%
 aluminium fluoride
 aluminium hydroxide
 aluminium nitrate
 aluminium phosphates
 aluminium sulfate, aqueous
 amines (see exact media)
 aminoethanols
 ammonia, aqueous 100%
 ammonia, aqueous 3% (liquid ammonia)
 ammonia, gaseous
 ammonium acetate, aqueous
 ammonium carbonate, aqueous
 ammonium chloride, aqueous 3% (salmiac)
 ammonium diphosphat, aqueous
 ammonium fluorides, aqueous
 ammonium metaphosphat, aqueous
 ammonium nitrate, aqueous
 ammonium phosphates, aqueous
 ammonium sulfate
 ammonium thiocyanate

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amyl alcohols pentanols
 amyl chlorides
 aniline
 aniline hydrochloride
 animals fat oil, animal
 anise oil
 anole cyclohexanol
 anone cyclohexanone
 anthraquinonesulfonics acid, aqueous
 antifreezes (see exact media)
 antimony chlorides, free of water
 antimony-III-chlorides, aqueous
 aqua fortis nitric acid
 aqua regia (nitrohydrochloric acid)
 argon
 aromatics, generally (see exact media)
 arsenic acid, aqueous
 asphalt
 ASTM-fuels gasoline
 ASTM-oils oil
 ATE-brake fluids brake fluids
 ATF-oil oil
 azurit cupric hydroxide
 barium chloride, aqueous
 barium hydroxide, aqueous
 barium sulfate
 barium sulfide
 basic aluminium acetate, aluminium acetates
 battery acid, sulfuric acid
 beef tallow (beef fat) oil, animal
 beer
 benzaldehyde
 benzene
 benzoic acid, aqueous
 benzyl alcohol
 benzyl benzoate
 benzylchloride
 bismuth carbonates
 bitter salt magnesium sulfate
 bitumen (asphalt)
 black liquor (cellulose-/ pulp-production)
 blood
 bone oils
 borax, aqueous
 boric acid, aqueous
 brake fluid, ATE
 brake fluid, ATS
 brake fluid, out of glycol ethers
 brine, sodium chloride
 bromine

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bromine water
 bromobenzene
 bromochloromethane
 butadiene
 butane, gaseous
 butane, liquid
 butanediols, butylglycol
 butanol, butylalcohol
 butanone, methyl ethyl ketone (MEK)
 butene, aqueous
 butter
 butter milk
 butyl acetates
 butyl benzoate
 butyl carbitol
 butyl oleate
 butyl phenol
 butyl stearate
 butylalcohol
 butylamine
 butylether
 butylglycol, aqueous
 butynediol
 butyraldehyde
 butyric acid
 calcium acetate
 calcium bisulfate, aqueous
 calcium bisulphite, aqueous
 calcium carbonate
 calcium chloride, aqueous 10%
 calcium hydroxide, aqueous
 calcium hypochlorite
 calcium nitrate
 calcium oxide (lime)
 calcium phosphates, aqueous
 calcium sulfate
 calcium sulfide
 camphor
 cane sugar, sugar
 carbitol
 carbolic acid, phenol
 carbolineum
 carbon dioxide, dry
 carbon dioxide, wet (carbonic acid)
 carbon disulfide
 carbon oxide (carbon monoxide)
 caro's acid
 casing head gas, natural gas
 castor oil
 caustic potash , potash lye

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caustic soda , sodium hydroxide
 celluloseacetate
 chloral hydrate
 chloramine, aqueous
 chloric acid, aqueous
 chloride of lime (bleach)
 chlorinated hydrocarbons, generally (see exact media)
 chlorinated water
 chlorine oxides
 chlorine, aqueous
 chlorine, gaseous dry
 chloro butadiene, chloroprene
 chloro ethane, ethyl chloride
 chloro ethanol, ethylene chlorohydrin
 chloroacetic acid, mono
 chlorobenzene
 chloroform (trichlormethanes)
 chloromethanes
 chloromethanes (chloroform, dichloromethane)
 chloroprene (chloro butadiene)
 chlorosulfuric acid
 chromic acid 10%
 chromic acid 17%
 chromic acid 25%
 chromic acid 50%
 citric acid, aqueous
 cleaners (washing agents), detergents
 coal tar
 coal tar creosote
 coconut oil
 coconuts fatty alcohol
 copper acetates, aqueous
 copper chloride, aqueous
 copper cyanide
 copper fluoride, aqueous
 copper hydroxide
 copper nitrate, aqueous
 copper sulfate, aqueous
 cottonseed oil
 creosote (coal tar)
 cresols -
 crotonaldehyde (butenal)
 crude oil, oil
 cumene isopropylbenzene
 cyanali, potassium cyanide
 cyclohexane
 cyclohexanol
 cyclohexanone
 cyclohexylamine
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detergents, generally (see exact media)
developing dyes, generally (see exact media)
dextrin, aqueous
dextrose, glucose
di... sebacic esters
diacetone alcohol
dibenzylether
dibutyl ether
dibutyl phthalates, phthalic ester
dibutylamine
dichloroacetic acid
dichloroacetic acid , chloroacetic acid
dichlorobenzenes
dichloroethanes
dichloroethylenes
dichloromethanes chloromethanes
dichloropropanes
diesel, -fuel/ -oil gasoline, dieseldiethanolamine
(iminodiethanol)
diethyl ether
diethyl sebacat sebacic esters
diethylamine
diethylbenzene
diethylene glycol
diglycol, diethylene glycol
diglycolic acid, aqueous
diluents (see exact media)
dimethyl ether
dimethylamine
dimethylanilin (xylidines)
dimethylformamide
dimethylheptanon
dinonyl phthalate , phthalic ester
dioctyl phthalate , phthalic ester
dioctyl sebacat , sebacic esters
dioxane
dipentene , limonene
diphenyl
diphenyl chloride
diphenyl ether
dipropylene glycol
dodecanol (lauryl alcohol, 1-dodecanol)
Eau de javelle, potassium hypochlorite
epichlorhydrin
essential oil of, generally
ethane
ethanol amines , aminoethanols
ethanol, 10% (ethyl alcohol, spirit)
ethanol, 100% (ethyl alcohol, spirit)
ethanthiol

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ethene , ethylene
 ethers, ethylene
 ethyl acetate, acetic acid ethyl ester
 ethyl acrylate, acrylic esters
 ethyl alcohol, ethanol
 ethyl chloride
 ethyl ether , diethyl ether
 ethylbenzene
 ethylbromide
 ethylene
 ethylene chloride, dichloroethanes
 ethylene chlorohydrin
 ethylene glycol (glycol)
 ethylene oxide, gaseous
 ethylenediamine
 FAM-Fuel, gasoline
 fats ,oil
 fatty acids with >7 C-atoms, generally
 fatty acids with 1-7 C-atoms, generally
 fatty alcohols, generally (see exact media)
 fermentation gas (marsh gas)
 fertilizing salt, aqueous
 fir needle oil
 fish liver oil 1
 flight-gasoline, gasoline (kerosene)
 fluorbenzene
 Fluoride of boron acid 65%
 fluorine, gaseous
 fluorosilicic acid, aqueous
 formaldehyde, aqueous
 formamide
 formic acid, 100%
 formic acid, 3%
 formic acid, 10%
 freon R 11 (frigen)
 freon R 113 (frigen)
 freon R 114 (frigen)
 freon R 12 (frigen)
 freon R 22 (frigen)
 fruit juice, fruit wine
 fungi, microbes
 furan
 furfurool
 gallic acid
 gasohol
 gasoline, ASTM-Fuel A
 gasoline, ASTM-Fuel B
 gasoline, ASTM-Fuel C
 gasoline, diesel/ diesel oil/ heating oil
 gasoline, FAM-Fuel DIN 51604-A

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gasoline, FAM-Fuel DIN 51604-B
 gasoline, FAM-Fuel DIN 51604-C
 gasoline, flight- (kerosene)
 gasoline, generally (see exact media)
 gasoline, white spirits
 gasoline-benzene (50/ 50%)
 gasoline-benzene (60/ 40%)
 gasoline-benzene (70/ 30%)
 gasoline-benzene (80/ 20%)
 gasoline-benzene-ethanol (50 /30 / 20%)
 gear lubricant, oil
 gelatin
 Glauber´s salt, sodium sulfate
 glucose (dextrose)
 glue (e.g. for wood)
 glycerol
 glycine, aqueous 10%
 glycol, ethylene glycol
 glycolic acid, 30%
 grape juice, fruit juice
 grape sugar, glucose
 HCFC, freon
 heating oil , gasoline, diesel
 helium
 heptane
 hexachlorocyclohexane, lindane
 hexanal
 hexane
 hexanetriol
 hexanol
 hexene
 hydraulic fluid, hydraulic oils DIN 51 524
 hydraulic fluid, oil-in-water-emulsion HFA
 hydraulic fluid, phosphoric esters HFD
 hydraulic fluid, polyglycol-water HFC 2
 hydraulic fluid, water-oil-emulsion HFB
 hydrazine
 hydrazine hydrate
 hydrobromic acid 50%
 hydrochloric acid, 3%
 hydrochloric acid, 10%
 hydrochloric acid, 40%
 hydrochlorofluorocarbons (HCFC), freon
 hydrofluoric acid 10%
 hydrofluoric acid 40%
 hydrofluoric acid 70%
 hydrogen
 hydrogen chloride, -gas/ -acid, hydrochloric acid
 hydrogen cyanide
 hydrogen peroxide, 3%

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hydrogen peroxide, 30%
hydrogen sulfide, dry or wet
hydrogen sulfites
hydroquinone, aqueous
hydrosilikoflouric acid, aqueous
hydroxylamine sulfate
ink, for writing
iron sulfates, aqueous
iron(III)-chloride, aqueous 10%
isobutylalcohol
isooctane
isooctanol
isophorone
isopropanol (isopropyl alcohol)
isopropylacetate
isopropylbenzene (cumene)
isopropylchloride
isopropylether
Javel water sodium hypochlorite
kerosene, gasoline (kerosene)
ketones, generally (see exact media)
kresols , cresols
lacquers (see exact media)/ solvent
lactic acid, aqueous 3%
lactic acid, aqueous 50%
lactic acid, aqueous10%
lanolin (wool fat)
laughing gas
laurylalcohol dodecanol
lavender oil
lead acetates, aqueous
lead arsenate, aqueous
lead nitrate, aqueous
lead sulfate
lemon juice
lighting gas (illuminating gas) , town gas
lime, calcium hydroxide
lime, calcium oxide
lime, burned, calcium oxide
lime, milk of- (lime water) ,calcium hydroxide
limonene (dipentene)
lindane, hexachlorocyclohexane
linoleic acid
linseed oil (flaxseed oil)
liquefied gas (LPG) (see exact media)
liquid ammonia ammonia
liquide manure
lithium bromide
lithium chloride
lubricating oils/ greases ,oil

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natural gas, wet with >7 C atoms
 natural gas, wet with 17 C atoms
 nickel acetate
 nickel chloride 2
 nickel sulfate
 nitric acid, 10%
 nitric acid, 25%
 nitric acid, 50%
 nitric acid, 100%
 nitrilotriethanol
 nitrobenzene
 nitrogen
 nitrogen oxides (nitrous fumes)
 nitroglycerin
 nitromethane
 nitropropanes
 nitrotoluenes
 nitrous fumes nitrogen oxides
 nonyl alcohol nonanol)
 octane
 octanols (octyl alcohol)
 oil, animal
 oil, ASTM
 oil, ASTM
 oil, ASTM
 oil, ATF
 oil, hydraulic hydraulic fluid
 oil, mineral
 oil, vegetable
 oleic acid
 oleum
 olive oil
 oxalic acid, aqueous 3
 oxiranes ethylene oxide
 oxygen air
 ozone
 palm oil
 palmitic acid
 para formaldehyde
 paraffin (paraffin oil)
 pectins
 pentachlorophenol
 pentanes
 pentanols (amyl alcohols)
 pentyl acetates
 perchloric acid, aqueous
 perchloroethylene tetrachloroethylene
 Perhydrol hydrogen peroxide
 petrol gasoline
 petroleum

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petroleum ether
 phenol
 phenyl ether , diphenyl ether
 phenylhydrazine
 phosgene
 phosphoric acid 3%
 phosphoric acid 50%
 phosphorus trichloride oxide
 photo developer, generally
 photo emulsion
 photo fixing
 phthalic ester (phthalates)
 picric acid
 pigs fat oil, animal
 polychlorinated biphenyls
 potash potassium carbonate
 potash lye 10%
 potash lye 50%
 potassium acetate, aqueous
 potassium aluminium sulfate alum
 potassium bicarbonate potassium
 hydrogencarbonate
 potassium bisulfate potassium hydrogensulfate
 potassium borate, aqueous
 potassium bromate 10%
 potassium bromide, aqueous
 potassium carbonate, aqueous (potash)
 potassium chlorate, aqueous
 potassium chloride, aqueous
 potassium chromate, aqueous 40%
 potassium cyanide, aqueous
 potassium dichromate, aqueous 40%
 potassium hydrogencarbonate
 potassium hydrogensulfate, aqueous
 potassium hydroxide potash lye
 potassium hypochlorite
 potassium iodide, aqueous
 potassium nitrate, aqueous
 potassium perchlorate, aqueous
 potassium permanganate, aqueous 5%
 potassium peroxodisulfate
 potassium phosphates
 potassium sulfate, aqueous
 potassium sulfite
 premium gasoline/ petrol gasoline
 propane, wet or gaseous
 propargyl alcohol, aqueous 7%
 propene (propylene)
 propionic acid (propane acid)
 propyl acetates

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propylamines
 propylene
 propylene glycols (propanediols)
 propylene oxide
 prussic acid, hydrogen cyanide
 pyridine
 pyrrole
 radiation, radioactive 108 Rad
 radiation, ultraviolet
 radiation, ultraviolet B and C
 rapeseed oil
 raw sugar juice
 refrigerating agent freon
 resorcinol
 saccharose sugar
 salicylic acid
 salmiac ammonium chloride
 salt water water
 salt, table
 sea water water
 sebacic esters
 silber salts, generally (see exact media)
 silicic acids, aqueous
 silicium dioxide silicic acids
 silicon oil/ fat
 silver nitrate, aqueous
 Skydrol hydraulic fluid, phosphoric esters
 soap suds detergents
 soda ash sodium carbonate
 soda lye sodium hydroxide
 sodium acetate, aqueous
 sodium benzoate, aqueous
 sodium bi... sodium hydrogen...
 sodium bromide
 sodium carbonate (soda ash)
 sodium chlorate, aqueous
 sodium chloride, aqueous (table salt)
 sodium chlorite, aqueous
 sodium cyanide
 sodium dichromate
 sodium fluorides, generally
 sodium hydrogencarbonate, aqueous
 sodium hydrogensulfate
 sodium hydrogensulfite, aqueous 10%
 sodium hydroxide (caustic soda), aqueous 10%
 sodium hydroxide (caustic soda), aqueous 50%
 sodium hypochlorite, aqueous 10%
 sodium metaphosphates
 sodium nitrate, aqueous 10%
 sodium nitrite

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sodium perborate	3	
sodium phosphates	2	
sodium silicate, aqueous		
sodium sulfate, aqueous (Glauber's salt)		
sodium sulfides	1	
sodium sulfite, aqueous 3%	1	
sodium thiosulfate	1	
solvents, generally (see exact media)	2	
soybeans oil	1	
spirit ethanol		
spirits	1	
starch sugar	1	
starch, aqueous	1	
steam water vapor		
steam of oleum		
stearic acid		
stone salt (halite) sodium chloride		
styrene	1	
succinic acid, aqueous	1	
sugar syrup (saccharose)	1	
sugar, dry	1	1
sulfonic acids, generally		
sulfur dioxide sulfuric acid		
sulfur trioxide (sulfur acid anhydride)		
sulfuric acid, 3%	---	
sulfuric acid, 25%	---	
sulfuric acid, 50%	---	
sulfuric acid, 90% (fuming, oleum)	---	
sulphur hexafluoride	1	
tallow (talcum)	1	
tanning acid tannine		
tannins (tanning acid)		
tar (tar oil)	3	
tartaric acid, aqueous	2	
tea tree oil		
tee, aqueous		
tetrachlorocarbonates chloromethanes		
tetrachloroethane	1	
tetrachloroethylene (perchloroethylene)	3	
tetrahydrofuran	1	
Tetralin (tetrahydronaphthalene)	1	
thionyl chloride	---	
thiophene	1	
tincture of iodine		
tin II chlorides, aqueous	3	
toluene	1	
town gas, free of benzene	1	
transformer oil		
tributyl phosphate	3	
trichlorethanes (methyl chloroform)		

trichloroacetic acid
 trichloroethylene
 trichloromethanes chloromethanes
 tricresyl phosphate
 triethylenamine
 triethylene glycol
 trisodium phosphates sodium phosphates
 tung oil tea tree oil
 turpentine
 turpentine, oil of
 urea, aqueous
 urine
 varnish
 vaseline
 vegetable oil
 vinegar
 vinyl acetate
 vinyl chloride
 vitriol oil oleum
 washing agents detergents
 waste water
 water
 water vapor (steam) water
 water, de-ionized
 water, demineralized water
 water, distilled water
 water, mineral water
 water, sea water/ salt water
 water glass aqueous
 weathering, generally
 whale oils
 white oil paraffin
 white spirits gasoline
 wine
 wood oil
 wool fat lanolin
 XYLAMON
 xylenes
 yeast, aqueous
 zinc acetate, aqueous
 zinc chloride, aqueous
 zinc sulfate, aqueous

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Las información dada en la tabla de resistencia son válidas para unas condiciones de trabajo específicas. Cambios en las condiciones como temperaturas más altas, química extrema

y/o estrés mecánico, combinado con factores dinámicos

puede afectar el rendimiento de cada tubo. Por lo tanto dichos valores no se pueden garantizar si las condiciones de trabajo están fuera de nuestro control.

Las valores de resistencias indicada en la tabla son valores sin compromiso por tanto, sólo los valores estándar son susceptibles a cambios y desviaciones.

Los datos significan:

1 muy buena resistencia:

El material probablemente no será atacado por el medio.

2 resistencia media:

El material probablemente tendrá una aptitud satisfactoria para utilizarse durante meses o hasta años.

3 resistencia condicional:

En contacto con el agente, en poco tiempo el tubo perderá prestaciones. Si el contacto perdura en el tiempo el material acabará siendo destruido.

- No resistente

No se recomienda su uso ya que se perderán propiedades mecánicas incluso puede provocar su desintegración y/o descomposición.