

The logo for FlowLine features the word "Flow" in a large, black, serif font. Below "Flow" are two horizontal bars: a red one on top and a white one on the bottom. To the right of these bars is the word "Line" in a smaller, black, serif font.

FlowLine

Application and Corrosion Data

**Butterfly Valve
Material Selection**

www.flowlinevalves.com



Application and Corrosion Data Butterfly Valve Materials Selection

Corrosion Ratings:

- E - Excellent
- G - Good
- U - Unsatisfactory
- O - Not Tested

	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Acetaldehyde	U	U	E	U	U	E	U
Acetamide	O	O	G	O	E	G	U
Acetic Acid - Crude	U	U	E	U	U	E	U
Acetic Acid - Pure	U	U	E	U	U	E	U
Acetic Acid - 10%	U	U	E	U	U	E	U
Acetic Acid - 80%	U	U	E	U	U	E	U
Acetic Acid - Anhydride	U	U	E	U	U	U	U
Acetone	G	G	E	E	U	E	U
Acetophenone	U	U	U	U	U	E	U
Acetylene	G	E	E	E	E	E	E
Acrylonitrile	G	G	E	E	U	G	G
Air (Dry)	E	E	E	E	E	O	O
Alcohol - Amyl	U	G	E	E	G	E	E
Alcohol - Butyl	U	G	E	E	G	E	E
Alcohol - Ethyl	U	O	E	E	G	E	G
Alcohol - Methyl	U	O	E	E	G	E	U
Alum - Ammonium	U	O	G	O	G	E	E
Alum - Chrome	U	O	G	O	G	O	E
Alum Potassium	U	O	G	O	G	E	O
Alumina	G	G	G	G	E	E	G
Aluminum Chloride	U	U	U	U	G	E	E
Aluminum Fluoride	U	O	G	O	G	E	E
Aluminum Hydroxide	U	O	G	O	G	O	G
Aluminum Nitrate	O	O	G	O	E	E	E
Aluminum Sulphate	U	G	G	U	E	E	E
Amines	U	U	E	O	G	E	O
Ammonia Anhydrous	U	G	E	U	G	E	U

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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Ammonia Solutions	U	G	E	U	G	E	O
Ammonium Acetate	U	O	G	O	O	G	O
Ammonium Carbonate	U	O	G	O	G	E	O
Ammonium Chloride 50% 180° F	U	U	G	U	E	E	E
Ammonium Hydroxide	U	G	E	U	E	E	O
Ammonium Nitrate 5% 60° F	U	G	E	U	E	G	U
Ammonium Phosphate	U	G	E	U	E	G	U
Ammonium Sulphate 90% 180° F	U	U	G	U	E	E	E
Ammonium Sulphide	O	O	O	O	G	G	O
Amyl Acetate	U	G	E	E	U	E	U
Amyl Chloride	U	G	E	E	U	U	E
Aniline 90% 70° F	U	G	E	U	U	G	G
Aniline Dyes	U	G	E	O	U	G	G
Antimony Trichloride	U	O	O	O	U	G	E
Aqua Regina	U	O	U	O	O	U	E
Arsenic Acid	O	G	G	O	U	U	G
ASTM Oil #1	G	E	E	E	E	U	E
ASTM Oil #3	G	E	E	G	E	U	E
ASTM Ref. Fuel A	G	E	E	G	G	U	E
ASTM Ref. Fuel B	G	E	E	G	G	U	E
ASTM Ref. Fuel C	G	E	E	G	G	U	E
Asphalt	E	E	E	E	U	U	E
Barium Carbonate 60° F	U	O	O	G	E	E	O
Barium Chloride	U	O	O	O	E	E	E
Barium Hydroxide	U	E	E	U	E	E	E
Barium Sulphate 60° F	U	O	E		E	E	E
Barium Sulphide	U	O	E	U	E	E	E



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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Beer (Beverage)	U	E	E	U	U	E	E
Beet Sugar Liquors	U	E	E	U	E	E	E
Benzaldehyde	U	E	E	E	U	G	U
Benzene (Benzol) 70° F	U	E	E	E	U	U	G
Benzenesulfonic Acid	U	O	G	O	O	U	E
Benzoic Acid 5% 70° F	U	G	E	O	U	U	G
Black Sulphate Liquor	U	G	E	U	E	U	E
Bleaching Powder - Wet	U	G	E	U	E	G	E
Borax	U	U	E	U	U	E	E
Boric Acid 5% 200° F	U	U	E	U	E	E	E
Brake Fluid (Automotive)	O	O	E	O	O	G	O
Brine (Acid)	U	O	O	O	E	E	E
Brine - Chlorinated	O	O	O	O	O	G	O
Bromine - Gas	U	U	U	O	U	U	E
Bromine - Water	U	U	U	O	U	U	E
Bromobenzene	O	O	O	O	O	U	E
Butadiene	U	G	E	O	U	E	E
Butane - Butylene	G	E	E	G	G	G	E
Butyl Acetate	G	E	E	E	U	U	U
Butyl Alcohol	G	O	E	O	G	E	E
Butyric Acid 5% 70° F	U	G	E	O	U	G	G
Calcium Bisulfite	U	G	G	U	E	U	E
Calcium Carbonate 60° F	U	O	O	O	E	E	E
Calcium Chlorate 20% 160° F	O	G	E	O	O	O	E
Calcium Chloride	U	G	G	E	E	E	E
Calcium Hydroxide 50% 175° F	U	E	E	U	G	E	E
Calcium Hypochlorite	O	G	G	O	U	E	G



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Calcium Nitrate	O	O	G	O	G	G	G
Calcium Oxide	U	O	U	O	O	G	O
Calcium Sulphate 90% 60° F	U	E	E	E	U	E	E
Calgon	U	O	E	O	E	O	E
Caliche Liquor	U	O	E	O	G	G	O
Cane Sugar Liquors	U	E	E	E	E	E	E
Carbitol	O	O	O	O	G	G	U
Carbon Bisulfide	O	O	O	O	U	U	E
Carbon Dioxide	U	E	E	E	G	G	E
Carbon Disulfide	U	O	O	G	U	U	E
Carbon Tetrachloride	U	G	G	U	U	U	E
Carbonic Acid	U	G	G	O	G	G	E
Castor Oil	G	G	E	G	G	U	E
Caustic Solutions 34% 200° F	U	G	E	U	U	G	E
Cellosolve	G	O	G	O	U	G	U
China Wood Oil (Tung)	U	O	E	U	E	U	E
Chlorine Gas - Dry 70°F	U	U	G	U	G	U	E
Chlorine Liquid	O	U	G	O	U	U	E
Chloroacetic Acid	U	O	O	G	U	E	U
Chlorobenzene 90% 70° F	U	E	E	E	U	U	G
Chloroform 70° F	U	G	E	E	U	U	E
Chlorosulfonic Acid 10	U	U	U	G	U	U	U
Chlorotoluene	O	O	O	O	U	U	G
Chromic Acid 5% 70° F	U	G	E	U	U	U	E
Citric Acid 5% 150°F	U	U	E	U	G	G	E
Coal Slurry	O	O	O	O	G	G	O
Coconut Oil (Food)	U	U	E	U	G	U	E



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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Coffee (Food)	U	U	E	U	U	G	G
Copper Chloride	U	U	U	G	G	G	G
Copper Cyanide	U	O	G	O	G	G	G
Copper Sulphate 80% 175°F	U	G	E	U	E	E	E
Corn Syrup	O	O	O	O	G	U	G
Cottonseed Oil	G	E	E	E	E	G	E
Creosol	U	U	E	O	U	U	G
Creosote	E	E	E	G	U	U	E
Cresylic Acid	O	G	E	O	G	U	E
Crude Oil	U	G	E	E	E	U	E
Cupric Chloride	O	O	O	O	G	G	G
Cupric Nitrate	O	O	O	O	O	G	G
Cupric Sulfate	O	O	O	O	G	G	G
Cyclohexane	U	E	E	E	G	U	G
Cyclohexanol	O	O	O	O	U	O	G
Cyclohexanone	O	O	O	O	U	U	U
Decalin	O	O	O	O	U	U	G
Decane	O	O	O	O	U	U	G
Detergents	O	O	G	O	G	E	O
Developing Solutions	O	O	O	O	O	G	E
Dextrose (Food)	U	U	E	O	E	O	O
Diacetone	U	O	O	E	U	G	U
Diamylamine	U	E	E	E	G	G	U
Dibutyl Phthlate	O	O	O	O	U	E	U
Dichlorobenzene	O	O	O	O	U	U	G
Dichloroethylene	U	O	U	O	U	U	G
Diesel Fuels	U	E	E	G	G	U	G

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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Diethyl Amine	U	E	E	E	G	G	G
Diethylene Glycol	O	O	O	O	G	G	O
Diethyl Ether	O	O	G	O	G	U	U
Diethyl Sebacate	O	O	O	O	U	G	E
Diethylene Glycol	O	O	O	O	G	G	O
Dissobutylene	O	O	O	O	G	O	E
Diocetyl Phthalate	O	O	O	O	U	G	G
Diocetyl Sebacate	O	O	O	O	U	G	O
Dioxane	O	O	G	O	U	G	U
Dowtherms	G	E	E	E	U	U	E
Drilling Mud	G	O	E	O	E	E	O
Epichlorohydrin	O	O	G	O	U	G	U
Epsom Salt	O	O	O	O	E	E	O
Ethane	O	O	O	O	E	U	O
Ethanolamine	O	O	O	O	G	G	O
Ethers	U	O	E	E	U	U	O
Ethyl Acetate	U	G	E	O	U	G	U
Ethyl Acetoacetate	O	O	G	O	O	G	O
Ethyl Acrylate	O	O	O	O	O	G	O
Ethyl Chloride 5% 60°F	U	G	E	E	E	E	O
Ethylene Dichloride	U	O	O	O	U	U	E
Ethylene Glycol (Anti-Freeze)	G	E	E	E	E	E	E
Ethylene Oxide	G	G	E	O	U	G	U
Fatty Acids	E	E	E	O	G	G	E
Ferric Chloride	U	U	O	U	U	G	E
Ferric Nitrate (PH7+) 5% 60°F	U	O	E	O	G	G	E
Ferric Sulphate 5% 60°F	U	O	G	U	E	E	E



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Ferrous Chloride	U	U	U	O	E	E	E
Ferrous Sulphate	U	G	E	U	E	E	E
Fertilizer Solutions	O	O	O	O	G	E	O
Fish Solutions	O	O	G	O	E	U	O
Fluoboric Acid	O		G	O	G	G	O
Fluorine 70°F	U	U	U	U	G	O	U
Fluosilicic Acid	U	U	G	E	G	E	U
Formaldehyde 70°F	U	G	E	E	U	G	E
Formic Acid 5% 150°F	U	G	E	E	U	E	U
Freon 11	U	E	E	E	G	U	G
Freon 12	U	E	E	E	G	U	G
Freon 22	U	E	E	E	G	U	U
Freon 113	U	E	E	E	G	U	O
Freon 114	U	E	E	E	G	U	O
Fruit Juices (Food) 70°F	U	U	E	U	G	G	O
Fuel Oil	U	E	E	E	G	U	O
Furfural	U	E	E	O	U	G	U
Gallic Acid 5% 200°F	U	O	E	O	E	E	E
Gasohol (Ethanol)	O	O	E	U	U	U	E
Gasoline - Automotive	U	E	E	G	G	U	E
Gelatin (Food)	U	U	E	U	G	G	E
Glucose	U	U	E	E	E	E	E
Glue	G	E	E	E	E	E	E
Glycerine/Glycerol 70°F	U	E	E	G	E	E	E
Glycols	O	O	O	O	E	E	E
Green Sulfate liquor	U	U	U	U	G	E	O
Heptane	U	G	E	E	E	U	E

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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Hexaldehyde	O	O	O	O	U	G	O
Hexane	U	G	E	E	E	U	E
Hexyl Alcohol	O	O	O	O	E	G	G
Hexylene Glycol	O	O	O	O	E	O	O
Hydraulic Oils	U	G	E	E	G	U	E
Hydrobromic Acid 200°F	U	U	U	U	U	G	E
Hydrochloric Acid 10% 60°F	U	U	U	U	U	E	E
Hydrochloric Acid 20% 60°F	U	U	U	U	U	G	E
Hydrochloric Acid 35% 60°F	U	U	U	U	U	G	E
Hydrocyanic Acid	U	O	G	U	U	E	E
Hydrofluoric Acid 48%	U	U	U	U	U	U	E
Hydrofluoric Acid 60%	U	U	U	U	U	U	G
Hydrofluoric Acid 100%	U	U	U	U	U	U	G
Hydrofluosilic Acid 5% 70°F	U	G	U	E	G	G	G
Hydrogen	U	G	E	U	E	E	E
Hydrogen Peroxide 90%	U	U	G	U	U	U	G
Hydrogen Sulfide - Dry	U	U	G	U	U	G	U
Hydrogen Sulfide - Wet	U	U	E	U	U	G	U
Hydroquinone	O	O	G	O	O	U	E
Hypochlorous Acid	U	U	U	O	O	E	E
Ink	O	O	O	O	E	U	E
Iodine	O	O	U	O	U	E	E
Iodine Solution	U	U	U	U	U	G	E
Isobutyl Alcohol	O	O	O	O	U	E	E
Iso-octane	U	E	E	E	E	U	E
Isopropyl Alcohol	U	E	E	E	U	E	E
Isopropyl Ether	O	O	O	O	E	U	U



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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Jet Fuel JP-1% thru JP-5%	O	O	G	O	E	U	E
Jet Fuel JP-6%	O	O	O	O	E	U	U
Kerosene	E	E	E	E	E	U	G
Lacquer Solvents	U	E	E	E	U	U	U
Lactic Acid 5% 70°F	U	U	G	U	U	G	E
Lard Oil 70°F	O	O	G	O	E	E	U
Lead Acetate	O	O	G	O	E	E	U
Lead Nitrate	O	O	O	O	G	E	G
Lead Sulfamate	O	O	O	O	O	G	G
Lead Sulfate	O	O	G	O	G	G	O
Lemon Oil	U	U	E	E	G	O	O
Ligroin	O	O	O	O	G	O	G
Lime Bleach	O	O	O	O	G	G	G
Lime Sulfur	O	G	E	G	U	G	G
Linoleic Acid	G	O	G	O	G	U	E
Linseed Oil	U	E	E	E	G	E	G
Lubricating Oil	E	E	E	E	E	U	E
Lye	O	O	O	O	O	G	O
Magnesium Chloride 4% 75°F	U	U	G	U	E	E	E
Magnesium Hydroxide	U	E	E	G	G	E	E
Magnesium Nitrate	O	O	G	O	O	G	O
Magnesium Oxide	O	O	O	O	O	G	O
Magnesium Sulphate 5% 120°F	U	G	E	E	E	E	E
Maleic Acid	O	O	G	O	E	U	E
Malic Acid	G	O	E	O	E	U	E
Mercuric Chloride 3% 60°F	U	U	U	U	G	E	E
Mercuric Cyanide	U	O	E	O	G	G	E



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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Mercurous Nitrate (pH7+)	U	O	O	O	U	O	O
Mercury	E	E	E	U	E	E	E
Mesityl Oxide	O	O	O	O	U	G	O
Methyl Acetate	U	G	E	O	U	G	U
Methyl Acetone	U	E	E	E	U	G	U
Methyl Alcohol	O	O	G	E	E	E	O
Methyl Cellosolve	U	E	E	E	U	G	O
Methyl Chloride	G	G	E	E	U	G	G
Methyl Ethyl Ketone	E	E	E	E	U	G	U
Methyl Isobutyl Ketone	E	O	E	O	U	G	U
Methyl Isopropyl Ketone	E	O	E	O	U	G	U
Methyl Methacrylate	O	O	O	O	U	U	U
Methyl Oleate	O	O	O	O	O	G	G
Methylene Chloride	O	O	O	O	U	U	G
Milk (Food)	U	U	E	U	G	E	O
Mineral Oil	U	O	G	O	G	U	E
Molasses (Food)	U	U	E	U	G	G	O
Monobromobenzene	O	O	O	O	U	U	G
Monochlorobenzene	O	O	O	O	U	U	G
Monoethanolamine	O	O	O	O	U	G	G
Naphta	U	E	E	E	G	U	E
Naphthalene	U	E	E	E	U	U	G
Natural Gas	G	E	E	E	G	U	E
Nickel Acetate	O	O	O	O	E	E	O
Nickel Ammonium Sulphate	U	O	E	O	E	E	O
Nickel Chloride	U	O	U	O	E	E	E
Nickel Sulphate 10% 60°F	U	O	E	O	G	E	E



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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Nitric Acid 10% 70°F	U	O	U	U	U	G	E
Nitric Acid 30% 70°F	U	O	O	U	U	G	E
Nitric Acid 60% 175°F	U	O	O	U	U	U	E
Nitric Acid 70%	U	U	U	U	U	U	E
Nitrobenzene	U	O	E	O	U	G	G
Nitroethane	O	O	O	O	U	G	O
Nitrous Acid 10%	O	O	G	O	U	E	O
Nitrous Oxide	O	O	O	O	U	G	G
Octadecane	O	O	O	O	G	U	G
Octane	O	O	O	O	G	U	G
Octyl Alcohol	O	O	O	O	G	U	G
Oils and Fats	E	E	E	E	E	U	O
Oils, Fish	U	G	E	U	G	U	O
Oleic Acid 100°F	U	U	G	G	G	G	G
Oleum	U	U	U	O	U	U	E
Olive Oil	O	O	O	O	E	U	O
Oxalic Acid	U	U	G	U	U	E	G
Oxygen	E	E	E	E	E	E	O
Ozone	U	G	E	O	U	E	E
Palmitic Acid	U	G	E	G	G	E	E
Pentane	O	O	O	O	E	U	O
Perchloroethylene	U	G	E	O	U	U	E
Perchloric Acid	O	U	U	O	U	G	E
Petrolatum	O	O	O	O	E	U	G
Petroleum - Refined	G	O	O	G	G	U	E
Petroleum - Sour	U	G	G	U	U	U	G
Phenol	U	O	G	O	U	U	G



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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Phenyl benzene	O	O	O	O	U	U	G
Phenylethyl Ether	O	O	O	O	U	U	U
Phenylhydrazine	O	O	O	O	U	G	E
Phorone	O	O	O	O	U	O	O
Phosphoric Acid 10% 70°F	U	U	G	U	G	E	E
Phosphoric Acid 25% 70°F	U	U	G	U	E	E	E
Phosphoric Acid 75% 70°F	U	U	G	U	U	E	E
Phosphorous Oxychloride	U	O	U	O	O	O	O
Phosphorous Trichloride	O	O	U	O	G	G	G
Photographic Solutions	O	O	E	O	O	O	G
Pickling Sol. (20 Nitric-4HF)	U	O	G	O	O	U	E
Picric Acid 80% 70°F	U	O	E	O	U	G	E
Pine Oil	O	O	O	O	G	U	E
Plating Solutions	O	O	G	O	O	G	G
Polyvinyl Acetate	O	O	O	O	O	G	O
Potash	O	O	O	O	O	G	O
Potassium Bisulfate	O	O	O	O	E	E	E
Potassium Bromide		O	G	O	E	E	E
Potassium Carbonate	G	O	E	E	E	E	E
Potassium Chlorate	O	O	G	O	G	E	E
Potassium Chloride	U	O	G	E	E	E	E
Potassium Cyanide	U	G	E	U	E	E	E
Potassium Dichromate	G	O	E	U	U	E	E
Potassium Ferricyanide	O	O	G	O	E	E	E
Potassium Ferrocyanide	O	O	O	O	E	E	E
Potassium Hydroxide 5% 70°F	U	G	E	U	E	E	E
Potassium Iodine	O	O	G	O	E	E	O



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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Potassium Nitrate 6% 68°F	U	G	E	U	G	E	E
Potassium Permanganate	G	O	G	O	U	E	O
Potassium Phosphate	U	O	G	O	E	E	E
Potassium Sulphate 7% 180°F	U	G	E	E	E	E	E
Potassium Sulfide	U	G	E	O	E	E	O
Potassium Sulfite	U	O	E	O	U	E	O
Propane	U	E	E	E	G	U	G
Propyl Acetate	O	O	O	O	U	G	O
Propyl Alcohol	O	E	E	O	E	E	E
Propyl Nitrate	O	O	O	O	O	G	O
Propylene Glycol	O	O	O	O	E	E	O
Propylene Oxide	O	O	O	O	O	G	U
Pydraul	O	O	O	O	U	U	G
Pyridine 150°F	O	O	O	O	U	G	U
Resins and Rosins	U	E	E	E	O	O	E
SAE #10 Oil	G	O	O	E	E	U	E
Salicylic Acid	O	O	E	O	E	E	E
Sea Water 70°F	U	U	G	G	E	E	E
Sewage	U	G	E	G	E	E	E
Silicone Greases	E	E	E	E	E	E	E
Silicone Oils	E	E	E	E	E	E	E
Silver Cyanide	O	O	O	O	E	E	O
Silver Nitrate	U	O	G	O	E	E	E
Silver Sulfate	O	O	O	O	O	E	E
Skydrol500	G	E	E	E	U	E	E
Soap Solution (Stearate) 70° F	U	U	E	E	E	E	E
Sodium Acetate 5% 75°F	U	U	E	E	G	E	U



Application and Corrosion Data Butterfly Valve Materials Selection

Corrosion Ratings:

- E - Excellent
- G - Good
- U - Unsatisfactory
- O - Not Tested

	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Sodium Aluminate	U	O	E	O	E	E	E
Sodium Bicarbonate	E	E	E	G	E	E	E
Sodium Bisulfate	U	U	E	O	E	E	E
Sodium Bisulfite	O	O	O	O	E	E	E
Sodium Carbonate 80% 60°F	U	G	E	G	E	E	E
Sodium Chlorate	E	O	G	O	O	G	E
Sodium Chloride 30% 180°F	U	E	E	E	E	E	E
Sodium Cyanide	U	O	E	U	E	E	E
Sodium Dichromate	O	O	O	U	E	E	E
Sodium Fluoride 5% 60°F	U	O	O	U	E	E	O
Sodium Hydroxide 5%	U	G	E	G	G	E	U
Sodium Hydroxide 20%	U	U	E	U	G	E	U
Sodium Hydroxide 50%	U	U	G	U	U	G	U
Sodium Hydroxide 70%	U	U	G	U	U	G	U
Sodium Hypchlorite 5% 60°F	U	O	G	U	U	E	G
Sodium Metaphosphate	O	G	E	O	E	E	E
Sodium Nitrate 30% 60°F	U	G	E	G	G	E	G
Sodium Perborate	U	G	E	O	G	E	E
Sodium Peroxide	U	G	E	U	U	E	E
Sodium Phosphate 5% 60°F	U	G	E	O	G	E	E
Sodium Silicate	U	G	E	G	E	E	E
Sodium Sulphate 80% 60°F	U	G	E	G	E	E	E
Sodium Sulfide 70% 70°F	U	G	E	U	U	E	E
Sodium Sulfite 5% 70°F	U	O	O	U	G	E	E
Sodium Thiosulfate	U	E	E	E	E	E	E
Stannic Chloride	U	U	U	O	E	E	E
Starch Solutions	O	O	O	O	E	E	E



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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Steam 225°F	U	U	E	E	U	E	U
Steam 300°F	U	U	E	G	U	G	U
Stearic Acid 90% 200°F	U	G	E	U	E	G	E
Stoddard's Solvent	O	O	O	O	E	U	E
Sulfur Chloride	G	U	G	E	U	U	E
Sulphur (Molten)	U	G	G	U	U	E	G
Sulphur Dioxide 60°F	U	G	E	U	U	E	U
Sulphur Trioxide	U	G	E	O	U	U	G
Sulfuric Acid 0-7% 70°F	U	U	G	U	U	G	E
Sulfuric Acid 7-40% 70°F	U	U	U	U	U	G	E
Sulfuric Acid 40-75% 70°F	U	U	U	U	U	U	E
Sulfuric Acid 75-95%	U	U	U	U	U	U	G
Sulfuric Acid 95-100%	U	U	U	U	U	U	G
Sulphurous Acid 80% 100°F	U	U	U	U	U	U	E
Tall Oil	U	G	E	O	G	U	O
Tannic Acid 150°F	U	G	E	G	O	E	E
Tar	U	E	E	E	G	U	E
Tartaric Acid 150°F	U	G	E	G	E	G	E
Tetraethyl Lead	O	O	O	O	G	U	E
Tetrahydrofuran	O	O	G	O	U	E	O
Toluol and Toluolene	U	E	E	E	U	U	G
Transformer Oil	G	G	G	O	E	U	E
Tributyl Phosphate	U	E	E	O	U	G	U
Trichloroacetic Acid	U	U	O	G	O	G	U
Trichloroethylene	U	U	E	E	U	U	G
Triethanolamine	U	U	O	O	O	G	U
Triethylamine	O	O	O	O	U	O	E

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	Nickel PI Duct. Iron	416 SS	316 SS	Alum. Bronze	Buna-N	EPDM	Viton
Trisodium Phosphate	U	U	O	O	G	G	E
Tung Oil	U	U	E	O	G	U	E
Turpentine	U	U	E	G	U	U	E
UREA	G	O	G	O	E	E	E
Varnish	E	E	E	E	O	O	G
Vinegar 70°F	U	O	E	O	U	E	E
Water, Acid - Mine	U	O	E	O	G	G	E
Water - Demineralized	U	O	E	E	E	E	E
Water - Fresh 180°F	E	E	E	E	E	E	E
Water - Fresh 225°F	E	E	E	E	U	G	U
Water - Salt 180°F	U	U	G	G	E	E	E
Water - Sewage 80°F	U	G	E	E	E	E	E
Whiskey and Wines	U	U	E	G	E	E	E
White Liquor	U	O	E	O	G	G	E
Xylene, Xylol	G	E	E	E	U	U	G
Zinc Acetate	O	O	O	O	E	E	O
Zinc Chloride 5% 160°F	U	U	G	U	U	E	E
Zinc Sulphate 25% 180°F	U	G	E	E	E	E	E



Application and Corrosion Data Butterfly Valve Materials Selection

The references in this document of available valve component materials and line media are a guide only. It is to be used as a basis for selecting suitable valve component materials to the applicable line media. In no way does this guide guarantee full valve component and line media compatibility. Only testing of components with line media assures compatibility.

The customer and or engineering firms representing the customer bares the full responsibility of complete compatibility of valve components with line media. In no way is Flow Line Valve and Controls, L.L.C. assume the responsibility for chemical resistance on various valve components that may affect the life expectancy of the valve.

The customer and or engineering firm representing the customer should always take into consideration factors of temperature, combinations of media components and media concentrations. The customers performing their own test are the only positive way of assuring compatibility.