

TB022321-001: 4851-1 Aggressive Environment Beam Trolley

Chemical Compatibility of the 4851-1

This Technical Bulletin affects the following Reliance products:

- 4851-1

The 4851-1 Aggressive Environment Beam Trolley has been constructed with materials that make it resistant to most chemical environments. The two materials of construction (304 Stainless Steel and UHMW-PE) do, however, have certain media's that they can be compromised in. The following table lists some of the most common chemicals that are found in industry.

If the rating is good, the trolley is acceptable for use with contact with the listed media. If the rating is conditional, contact Reliance Engineering at 303-424-8650 prior to use. If the rating is Do Not Use, one or both of the materials are not rated for contact with the listed media, the Beam Trolley is **NOT** approved for use with these materials.

If the media that you need is not listed please contact Reliance Engineering at 303-424-8650 prior to use.

Media	Rating
Acetaldehyde	Conditional
Acetic Acid 80%	Conditional
Acetic Anhydride	Good
Acetone	Good
Aluminum Chloride	Good
Aluminum Sulfate	Good
Ammonium Carbonate	Good
Ammonium Chloride	Conditional
Ammonium Hydroxide	Good
Ammonium Nitrate	Good
Ammonium Persulfate	Good
Ammonium Sulfate	Good
Amyl Acetate	Do Not Use
Amyl Alcohol	Do Not Use
Amyl Chloride	Do Not Use
Aniline	Good
Aqua Regia (80% HCl, 20% HNO3)	Do Not Use
Arsenic Acid	Good
Barium Carbonate	Good
Barium Chloride	Good
Barium Hydroxide	Good
Barium Sulfide	Good

Media	Rating
Magnesium Carbonate	Good
Magnesium Chloride	Do Not Use
Magnesium Hydroxide	Good
Magnesium Nitrate	Good
Magnesium Sulfate (Epsom Salts)	Good
Mercuric Chloride	Do Not Use
Mercuric Cyanide	Conditional
Mercury	Good
Methanol (Methyl Alcohol)	Good
Methylene Chloride	Good
Milk	Good
Molasses	Good
Naphtha	Conditional
Naphthalene	Conditional
Nickel Chloride	Do Not Use
Nickel Nitrate	Good
Nickel Sulfate	Good
Nitric Acid (<20%)	Good
Nitrobenzene	Good
Oleic Acid	Good
Oxalic Acid (cold)	Good
Perchloroethylene	Good



Media	Rating
Beer	Good
Benzene	Conditional
Benzoic Acid	Good
Borax (Sodium Borate)	Good
Boric Acid	Good
Bromine	Do Not Use
Butter	Conditional
Calcium Chloride	Conditional
Calcium Hydroxide	Good
Calcium Nitrate	Conditional
Calcium Oxide	Good
Carbon Dioxide (wet)	Good
Carbon Disulfide	Do Not Use
Carbon Monoxide	Good
Carbonic Acid	Good
Chlorine Gas	Do Not Use
Chlorine Water	Conditional
Chromic Acid 10%	Good
Chromic Acid 50%	Conditional
Cider	Good
Citric Acid	Good
Coffee	Good
Copper Chloride	Do Not Use
Copper Cyanide	Good
Copper Nitrate	Good
Copper Sulfate	Good
Diethylene Glycol	Good
Ethyl Acetate	Conditional
Ethyl Chloride	Conditional
Ethyl Ether	Good
Ethylene Chloride	Conditional
Ethylene Glycol	Good
Fatty Acids	Good
Ferric Chloride	Do Not Use
Ferric Nitrate	Good
Ferrous Chloride	Do Not Use
Ferrous Sulfate	Good
Fluoboric Acid	Good
Fluosilicic Acid	Conditional
Formic Acid	Good
Fruit Juice	Good
Gallic Acid	Conditional
Gasoline (high-aromatic)	Good

Media	Rating
Phosphoric Acid	Do Not Use
Photographic Solutions	Do Not Use
Potassium Bicarbonate	Good
Potassium Bromide	Good
Potassium Chlorate	Good
Potassium Chloride	Good
Potassium Chromate	Good
Potassium Cyanide Solutions	Good
Potassium Dichromate	Good
Potassium Hydroxide (Caustic Potash)	Good
Potassium Nitrate	Good
Potassium Permanganate	Good
Potassium Sulfide	Good
Propylene Glycol	Good
Pyridine	Good
Salicylic Acid	Good
Sea Water	Conditional
Silver Nitrate	Good
Soap Solutions	Good
Sodium Acetate	Good
Sodium Bicarbonate	Good
Sodium Bisulfate	Do Not Use
Sodium Borate (Borax)	Good
Sodium Bromide	Conditional
Sodium Carbonate	Good
Sodium Chlorate	Good
Sodium Chloride	Good
Sodium Cyanide	Good
Sodium Ferrocyanide	Good
Sodium Fluoride	Do Not Use
Sodium Hydroxide	Conditional
Sodium Hypochlorite	Do Not Use
Sodium Nitrate	Good
Sodium Sulfate	Good
Stannic Chloride	Do Not Use
Stannous Chloride	Conditional
Starch	Good
Stearic Acid	Good
Sulfuric Acid	Do Not Use
Tallow	Good
Tannic Acid	Good
Tartaric Acid	Conditional
Tetrahydrofuran	Conditional



Media	Rating
Glucose	Good
Glycerin	Good
Glycolic Acid	Good
Hydrobromic Acid	Do Not Use
Hydrochloric Acid	Do Not Use
Hydrofluoric Acid	Do Not Use
Hydrogen Peroxide (<30%)	Good
Hydrogen Sulfide (aq)	Conditional
Hydroquinone	Good
Iodine	Do Not Use
Lactic Acid	Good
Lead Acetate	Good
Lead Nitrate	Good

Media	Rating
Toluene (Toluol)	Good
Trichloroethylene	Good
Trisodium Phosphate	Good
Turpentine	Conditional
Urea	Good
Urine	Good
Vinegar	Good
Water, Fresh	Good
Whiskey & Wines	Good
Xylene	Do Not Use
Zinc Chloride	Good
Zinc Sulfate	Good

