

# Chemical Compatibility Guide

## Ultra-Track Pans, Composite Model, Standard Resin

### For standard UltraTech Composite Track Pans

This listing was prepared to provide guidance to the chemical compatibility of Ultra-Track Pans, Composite Model.

The standard resin used in the fiberglass composite is susceptible to attack by some chemicals which may cause stress cracking, swelling, oxidation or may permeate the containment. These reactions may reduce the physical properties of the composite.

When considering an UltraTech Composite Track Pan for use in secondary containment applications, it is important to note that most secondary containment products are designed to hold leaked chemicals for only hours per day – at most one week. These secondary containment units would then be cleaned of any chemical. In these short-term applications, a greater variety of chemicals may be used with the standard fiberglass composite since the exposure time of the chemical to the resin is limited.

| Chemical                    | Rating | Max Temp*     | Chemical                | Rating | Max Temp*     | Chemical                          | Rating | Max Temp*     | Chemical                      | Rating | Max Temp*     |
|-----------------------------|--------|---------------|-------------------------|--------|---------------|-----------------------------------|--------|---------------|-------------------------------|--------|---------------|
| Acetic Acid, <80%           | A      | 150°F (66°C)  | Butyl Alcohol, 100%     | A      | 140°F (66°C)  | Glucose                           | A      | 140°F (60°C)  | Potassium Carbonate, 100%     | A      | 180°F (82°C)  |
| Acetic Acid, 80-100%        | NR     |               | Butyric Acid, <70%      | A      | 70°F (21°C)   | Glycerine                         | A      | 180°F (83°C)  | Potassium Chloride, 100%      | A      | 212°F (100°C) |
| Acetic Acid, 60%            | A      | 180°F (82°C)  | Calcium Bisulfate       | A      | 140°F (60°C)  | Glycolic Acid, <30%               | A      | 180°F (83°C)  | Potassium Ferricyanide, 100%  | A      | 300°F (149°C) |
| Acetone, 50-100%            | NR     |               | Calcium Carbonate       | A      | 140°F (60°C)  | Glycolic Acid, 30-100%            | A      | 100°F (38°C)  | Potassium Ferrocyanide, 100%  | A      | 300°F (149°C) |
| Acetophenone                | A      | 70°F (21°C)   | Calcium Chloride, 100%  | A      | 300°F (149°C) | Heptane                           | A      | 140°F (60°C)  | Potassium Nitrate             | A      | 300°F (149°C) |
| Acrylic Acid                | A      | 100°F (38°C)  | Calcium Hydroxide, 100% | A      | 70°F (21°C)   | Hydrobromic Acid, <50%            | A      | 190°F (88°C)  | Potassium Permanganate        | A      | 180°F (82°C)  |
| Acrylonitrile, 100%         | NR     |               | Calcium Nitrate, 100%   | A      | 100°F (38°C)  | Hydrogen Bromide <50%             | A      | 190°F (88°C)  | Potassium Persulfate          | A      | 300°F (149°C) |
| Alum, Potassium             | A      | 150°F (66°C)  | Calcium Sulfate         | A      | 150°F (66°C)  | Hydroxyacetic Acid, <30%          | A      | 180°F (83°C)  | Potassium Sulfate             | A      | 300°F (149°C) |
| Aluminum Chloride, 100%     | A      | 300°F (149°C) | Caprylic Acid           | A      | 160°F (71°C)  | Hydroxyacetic Acid, 31-100%       | A      | 100°F (38°C)  | Silver Nitrate                | A      | 104°F (40°C)  |
| Aluminum Potassium Sulfate  | A      | 250°F (121°C) | Carbon Disulfide        | NR     |               | Hypochlorous Acid, 100%           | A      | 300°F (149°C) | Sodium Acetate                | A      | 300°F (149°C) |
| Aluminum Sulfate, 100%      | A      | 300°F (121°C) | Carbonic Acid           | A      | 140°F (60°C)  | Iron Chloride III, 20%            | A      | 300°F (149°C) | Sodium Aluminate              | NR     |               |
| Ammonia, Aqueous, >30%      | A      | 70°F (21°C)   | Chloroacetic Acid, 100% | A      | 100°F (38°C)  | Isopropyl Alcohol, 100%           | A      | 70°F (21°C)   | Sodium Benzoate               | A      | 300°F (149°C) |
| Ammonium Acetate            | NR     |               | Chlorobenzene           | NR     |               | Kerosene                          | A      | 300°F (149°C) | Sodium Bicarbonate            | A      | 150°F (66°C)  |
| Ammonium Bicarbonate        | A      | 150°F (66°C)  | Citric Acid, 100%       | A      | 300°F (149°C) | Lactic Acid, 100%                 | A      | 300°F (149°C) | Sodium Bisulfate              | A      | 180°F (82°C)  |
| Ammonium Carbonate          | A      | 150°F (66°C)  | Copper Acetate          | A      | 300°F (149°C) | Lead Acetate                      | A      | 300°F (149°C) | Sodium Bisulfite              | A      | 300°F (149°C) |
| Ammonium Chloride           | A      | 300°F (149°C) | Copper Chloride, 100%   | A      | 300°F (149°C) | Lime Slurry, to saturated         | A      | 180°F (82°C)  | Sodium Borate                 | A      | 180°F (82°C)  |
| Ammonium Citrate            | A      | 300°F (149°C) | Copper Cyanide          | A      | 250°F (121°C) | Lithium Chloride                  | NR     |               | Sodium Bromide                | A      | 300°F (149°C) |
| Ammonium Hydroxide, 5%      | A      | 212°F (100°C) | Copper Nitrate          | A      | 300°F (149°C) | Magnesium Carbonate, to saturated | A      | 300°F (149°C) | Sodium Carbonate              | A      | 150°F (66°C)  |
| Ammonium Hydroxide, 10%     | A      | 70°F (21°C)   | Copper Sulfate, 100%    | A      | 300°F (149°C) | Magnesium Chloride, 100%          | A      | 250°F (121°C) | Sodium Chlorate               | A      | 140°F (60°C)  |
| Ammonium Hydroxide, 10%     | NR     | 160°F (71°C)  | Cresols                 | NR     |               | Magnesium Nitrate                 | A      | 180°F (82°C)  | Sodium Chloride               | A      | 300°F (149°C) |
| Ammonium Hydroxide, >20%    | NR     |               | Dibutyl Ether           | A      | 100°F (38°C)  | Magnesium Sulfate                 | A      | 300°F (149°C) | Sodium Chlorite, to saturated | A      | 180°F (82°C)  |
| Ammonium Nitrate            | A      | 300°F (149°C) | Diesel Fuel             | A      | 140°F (60°C)  | Mercuric Chloride, 100%           | A      | 300°F (149°C) | Sodium Cyanide                | A      | 180°F (82°C)  |
| Ammonium Persulfate         | A      | 150°F (66°C)  | Diethylene Glycol       | A      | 140°F (60°C)  | Mercurous Chloride, 100%          | A      | 180°F (82°C)  | Sodium Ferricyanide           | A      | 300°F (149°C) |
| Ammonium Phosphate          | NR     |               | Diethyl Phthalate       | NR     |               | Mercury, 100%                     | A      | 300°F (149°C) | Sodium Ferrocyanide           | A      | 70°F (21°C)   |
| Ammonium Sulfate            | A      | 120°F (49°C)  | Diphenyl Ether          | NR     |               | Methanol, 37%                     | A      | 300°F (149°C) | Sodium Hydroxide, 5%          | A      | 120°F (49°C)  |
| Ammonium Thiocyanate        | A      | 250°F (121°C) | Diphenyl Oxide          | NR     |               | Methyl Ethyl Ketone (MEK), 20%    | A      | 70°F (21°C)   | Sodium Hypochlorite (Bleach)  | NR     |               |
| Ammonium Thiosulfate        | NR     |               | Dipropylene Glycol      | NR     |               | Methylene Chloride                | NR     |               | Sodium Metaphosphate          | A      | 140°F (60°C)  |
| Amyl Acetate                | A      | 120°F (49°C)  | Dodecyl Alcohol         | A      | 100°F (38°C)  | Mineral Oils                      | A      | 180°F (82°C)  | Sodium Nitrate                | A      | 300°F (149°C) |
| Amyl Alcohol                | A      | 300°F (149°C) | Ethyl Acetate           | A      | 160°F (71°C)  | Monochlorobenzene, 100%           | A      | 212°F (100°C) | Sodium Sulfate                | A      | 300°F (149°C) |
| Amyl Chloride               | NR     |               | Ethylbenzene            | A      | 212°F (100°C) | Monoethanolamine, 20%             | A      | 194°F (90°C)  | Sodium Sulfide                | A      | 190°F (88°C)  |
| Aniline Hydrochloride, 100% | A      | 300°F (149°C) | Ethyl Ether             | A      | 70°F (21°C)   | Naphtha                           | A      | 150°F (66°C)  | Sodium Thiosulfate            | A      | 140°F (60°C)  |
| Antifreeze, 100%            | A      | 70°F (21°C)   | Ethylene Bromide        | NR     |               | Napthalene                        | A      | 300°F (149°C) | Sodium Tripolyphosphate       | A      | 140°F (60°C)  |
| Antimony Pentachloride      | NR     |               | Ethylene Glycol         | A      | 250°F (121°C) | Nickel Chloride, to saturated     | A      | 250°F (121°C) | Styrene                       | NR     |               |
| Antimony Trichloride        | A      | 190°F (88°C)  | Fatty Acids             | A      | 250°F (121°C) | Nickel Nitrate, to saturated      | A      | 250°F (121°C) | Sulfuric Acid, <50%           | A      | 180°F (82°C)  |
| Barium Acetate              | NR     |               | Ferric Chloride, 100%   | A      | 225°F (107°C) | Nickel Sulfate, to saturated      | A      | 250°F (121°C) | Sulfuric Acid, <70%           | A      | 150°F (66°C)  |
| Barium Carbonate            | A      | 140°F (60°C)  | Ferric Nitrate          | A      | 225°F (107°C) | Nitric Acid, 10%                  | NR     |               | Sulfuric Acid, >70%           | NR     |               |
| Barium Chloride             | A      | 140°F (60°C)  | Ferric Sulfate          | A      | 225°F (107°C) | Nitrous Acid, 10%                 | NR     |               | Sulfurous Acid, 100%          | A      | 300°F (149°C) |
| Barium Sulfate              | A      | 140°F (60°C)  | Ferrous Chloride        | A      | 80°F (27°C)   | Oleic Acid                        | A      | 160°F (71°C)  | Tannic Acid, 10%              | A      | 160°F (71°C)  |
| Barium Sulfide              | A      | 140°F (60°C)  | Ferrous Nitrate         | NR     |               | Oxalic Acid, 100%                 | A      | 80°F (27°C)   | Tartaric Acid                 | A      | 300°F (149°C) |
| Benzaldehyde                | NR     |               | Ferrous Sulfate         | A      | 80°F (27°C)   | Palmitic Acid, 100%               | A      | 180°F (82°C)  | Toluene                       | NR     |               |
| Benzene                     | A      | 90°F (32°C)   | Formaldehyde, <37%      | A      | 300°F (149°C) | Perchloroethylene                 | NR     |               | Turpentine                    | A      | 180°F (82°C)  |
| Benzene Sulfonic Acid, 10%  | A      | 190°F (88°C)  | Formaldehyde, 50-100%   | A      | 100°F (38°C)  | Phenol                            | NR     |               | Urea                          | A      | 180°F (82°C)  |
| Benzene Sulfonic Acid, 100% | A      | 75°F (24°C)   | Formic Acid, <70%       | A      | 70°F (21°C)   | Phosphoric Acid, 85%              | A      | 300°F (149°C) | Xylene                        | A      | 150°F (66°C)  |
| Benzoic Acid                | A      | 140°F (60°C)  | Formic Acid, 50-100%    | NR     |               | Phosphorous Trichloride           | A      | 180°F (82°C)  | Zinc Chloride                 | A      | 200°F (93°C)  |
| Benzyl Alcohol              | A      | 194°F (90°C)  | Fuel Oil                | A      | 140°F (60°C)  | Picric Acid, 1%                   | A      | 180°F (82°C)  | Zinc Sulfate                  | A      | 160°F (71°C)  |
| Boric Acid, 100%            | A      | 140°F (60°C)  | Furfural, Fumes         | A      | 100°F (38°C)  | Polyvinyl Acetate Emulsion        | A      | 300°F (149°C) |                               |        |               |
| Butyl Acetate, 100%         | A      | 140°F (60°C)  | Furfural Alcohol        | A      | 100°F (38°C)  | Potassium Bicarbonate, 100%       | A      | 190°F (88°C)  |                               |        |               |

\*Temperature of the chemical in the railcar and/or at the railcar filling source

Ratings: A: Acceptable - NR: Not Recommended

