

Immersion Heater Chemical Guide

(For Metal Heaters)

<u>SOLUTION</u>	<u>TYPE OF HEATER</u>
Alkaline Cleaners (Electrified)	304 Stainless Steel
Alkaline Soaking Cleaners	304 Stainless Steel
Alodine (most formulas)	316 Stainless Steel
Alstan	304 Stainless Steel
Aluminum Cleaners	304 Stainless Steel
Aluminum Sulfate	304 Stainless Steel
Ammonia	304 Stainless Steel
Ammonium Chloride	Titanium
Ammonium Nitrate	316 Stainless Steel
Arsenic	304 Stainless Steel
Barium Chloride	Titanium
Benzoic Acid	Titanium
Black Oxide (Hi-Temp)	304 Stainless Steel
Black Oxide (Low-Temp)	Titanium
Bonderizing	316 Stainless Steel
Boric Acid	Titanium
Brass Cyanide	304 Stainless Steel
Bright Nickel	Titanium
Bright Copper Cyanide	304 Stainless Steel
Bronze (Alkaline)	304 Stainless Steel
Brown Oxide	Titanium
Butyric Acid	Titanium
Cadmium (Alkaline)	304 Stainless Steel
Calcium Chloride	Titanium
Calcium Hypochlorite	Titanium
Carbonic Acid	Titanium
Chloride	Titanium
Chlorosulfuric Acid	Titanium
Chromium (No Fluorides)	Titanium
Citric Acid	Titanium
Cobalt Nickel	Titanium
Cobalt Plating	304 Stainless Steel
Copper Cyanide	304 Stainless Steel
Copper Pyrophosphate	304 Stainless Steel
Copper Strike	304 Stainless Steel
Cyanide	304 Stainless Steel
Deionized Water	316 Stainless Steel or Titanium
Deoxidizer Non-Chromated	316 Stainless Steel
Diethylene Glycol	304 Stainless Steel
Dow Therm	316 Stainless Steel

<u>SOLUTION</u>	<u>TYPE OF HEATER</u>
Dye Solutions	304 Stainless Steel
Ebonal C	Titanium
Electroless Nickel	Titanium
Electroless Tin (Alkaline)	316 Stainless Steel
Electro Cleaner	304 Stainless Steel
Ferric Ammonium Oxide	316 Stainless Steel
Ferric Chloride	Titanium
Ferric Nitrate	304 Stainless Steel
Ferric Sulfate	304 Stainless Steel
Formic Acid	316 Stainless Steel
Glycerol	304 Stainless Steel
Gold (Immersion)	304 Stainless Steel
Gold-Acid	Titanium
Gold Cyanide	304 Stainless Steel
Grey Nickel	Titanium
Hot Seal Dichromate	316 Stainless Steel
Iridite (4-75, 4-73, 14, 14-2, 14-9)	316 Stainless Steel
Iron Phosphate	316 Stainless Steel
Isoprep (186, 187, 188)	316 Stainless Steel
Jetal	304 Stainless Steel
Lead Acetate	304 Stainless Steel
Lime Saturated Water (Alkaline)	316 Stainless Steel
Linseed Oil	304 Stainless Steel
Magnesium Hydroxide	304 Stainless Steel
Manganese Phosphate	316 Stainless Steel
Mercuric Chloride	Titanium
Nickel (Plating Solution) (Watts)	Titanium
Nickel Acetate Seal	316 Stainless Steel
Nickel Chloride	Titanium
Paint Stripper (Alkaline)	304 Stainless Steel
Perchloroethylene	316 Stainless Steel
Phosphate Cleaner	304 Stainless Steel
Phosphate	316 Stainless Steel
Potassium Cyanide	304 Stainless Steel
Potassium Hydroxide	304 Stainless Steel
Potassium Permanganate	Titanium
Rochelle Salt Cyanide	304 Stainless Steel
Sea Water	Titanium
Silver Bromide	316 Stainless Steel
Silver Cyanide	304 Stainless Steel
Silver Lume	304 Stainless Steel
Silver Nitrate	316 Stainless Steel
Sodium Carbonate	Titanium
Sodium Chlorate	Titanium

<u>SOLUTION</u>	<u>TYPE OF HEATER</u>
Sodium Chloride	Titanium
Sodium Cyanide	304 Stainless Steel
Sodium Dichromate (Hot Seal)	316 Stainless Steel
Sulfamate Nickel	Titanium
Tannic Acid	Titanium
Tin Plating (Alkaline)	304 Stainless Steel
Trichlorethylene	316 Stainless Steel
Turco (4181, 4338)	316 Stainless Steel
Water	316 Stainless Steel
Wood's Nickel Strike	Titanium
Zinc Acid	Titanium
Zinc Ammonium Chloride	Titanium
Zinc Cyanide	304 Stainless Steel
Zinc Phosphate	316 Stainless Steel
Zincate	304 Stainless Steel

This information is provided as a courtesy chemical solution guide only. Due to the complexities of solutions and applications, HeatStar Systems cannot assume responsibility for any advice furnished. We do not guarantee heaters against premature failure due to corrosive action caused by unusual conditions. It is the customer's obligation to contact his chemical supplier for heater sheath compatibility.

NEVER USE ELECTRIC IMMERSION HEATERS TO HEAT FLAMMABLE SOLUTIONS!