



Technical Data

Heating Element Selection Guidelines

Heated Material	Maximum Temp (F)	Watt-Density Stagnant/Flowing	Suggested Sheath	Notes
Acetic Acid	200	40	TF, QZ	
Acetone	200	10	IN	
Alkaline Solutions	200	23	IN	
Aluminum Sulfate	200	23	304SS	
Aniline	400	20	304SS	
Animal Glue				Contact Gaumer
Asphalt	300	4 (8)	IN	@ 300 F
Asphalt	500	3 (8)	IN	@ 500 F
Asphalt	200	6 (8)	IN	@ 200 F
Barium Hydroxide	200	40	316SS	
Benzene	200	8	IN	
Calcium Chlorate	200	40	IN	
Carbon Tetrachloride	200	23	IN	
Caustic Soda (10%)	210	23	IN	
Chromic Acid	200	40	TF, QZ	
Citric Acid	200	23	IN	
Dowtherm A (Liquid)	700	15	IN	
Dowtherm A (Vapor)	700	8	IN	
Dowtherm E	400	8 (15)	IN	
Dowtherm G	650	12 (15)	IN	
Dye Solutions	212	23	IN	
Electroplating Baths				Contact Gaumer
Ethylene Glycol	300	30	IN	
Freon (Liquid)	300	23	IN	
Freon (Vapor)	300	6	IN	
Fuel Oil Bunker C	160	4 (8)	IN	
Fuel Oil No. 1	200	15 (23)	IN	
Fuel Oil No. 2	200	15 (23)	IN	
Fuel Oil No. 4	200	8 (15)	IN	
Fuel Oil No. 5	200	8 (15)	IN	
Fuel Oil No. 6	200	4 (8)	IN	
Gasoline	160	12 (23)	IN	
Grease (Liquid)		23	IN	
Grease (Solid)		6	IN	
Heat Transfer Oils	600	8 (15)	IN	@ 600 F
Heat Transfer Oils	500	12 (23)	IN	@ 500 F
Hot Melt Adhesives	400		IN	
Iron Phosphate				Contact Gaumer

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Kerosene	300		IN	
Lactic Acid	122	10	IN	
Linseed Oil	150	15 (23)	IN	
Lube Oil SAE 10, 90-100S	250	15 (23)	IN	@ 130 F
Lube Oil SAE 20, 120-185	250	15 (23)	IN	@ 130 F
Lube Oil SAE 30, 185-255	250	15 (23)	IN	@ 130 F
Lube Oil SAE 40, 40-80S	250	12 (15)	IN	@ 210 F
Lube Oil SAE 50, 80-105S	250	12 (15)	IN	@ 210 F
Mineral Oil	200	23	IN	@ 200 F
Mineral Oil	400	15	IN	@ 400 F
Mobiltherm 600	600	12 (15)	IN	
Mobiltherm 603	600	12 (15)	IN	
Molasses	100	3	IN	
Molten Salt	900	23	IN	
Molten Tin	600	20	IN	
Naptha	212	10	IN	
Nitric Acid	167	20	TF, QZ	
Oakite Solutions (Clear)	212	40	IN	
Oakite Solutions (Cloudy)	212	23	IN	
Paraffin	150	15	IN	
Perchlorethylene	200	23	IN	
Phosphoric Acid				Contact Gaumer
Potassium Chloride	212	40	IN	
Potassium Hydroxide	160	25	IN	
Propylene Glycol	150	15	IN	
Soap Solutions	212	23	IN	
Sodium Cyanide	140	23	IN	
Sodium Hydroxide	212	20	IN	
Sodium Phosphate				Contact Gaumer
Tar	200	6 (8)	IN	
Therminol 66	625		IN	
Toluene	212	23	IN	
Trichlorthylene	150	23	IN	
Turpentine	300	20	IN	
Vapor Degreasing	240	23	IN	
Vegetable Oil (Liquid)	400	23	304SS	
Vegetable Oil (Solid)		6	304SS	
Water (Process)	212	60	IN	
Wax	150	15	IN	