

OSECO CORROSION DATA SURVEY

LEGEND			H A S T C 2 7 6	3 1 6	I N C 6 0 0	N I C K E L 2 0 0	M O N E L 4 0 0	T A N T A L U M 4 0 0	A L U M I N U M 4 0 0	S I L V E R 4 0 0	T I T A N I U M 4 0 0	P L A T I N U M 4 0 0	T E L L U R I U M 4 0 0	Z I N C K 4 0 0	G R A P H I T E 4 0 0	
Media	Concentration	Temp. °F														
Acetaldehyde	All	200	②	②	②	②	①	①	①	①	③	②	①	③	①	
Acetic Acid	20%	70°	①	①	②	②	②	①	②	②	①	②	①	①	①	①
Acetic Acid	50%	70°	①	①	②	②	②	①	②	②	①	②	①	①	①	①
Acetic Acid	80%	70°	①	①	②	②	②	①	①	②	①	②	①	①	①	①
Acetic Acid	100%	70°	①	①	②	②	②	①	①	②	①	②	①	①	①	①
Acetic Acid	50%	Boiling	①	①	②	②	②	①	③	②	①	②	①	①	①	①
Acetic Acid	80%	Boiling	①	①	②	②	②	①	③	②	①	②	①	①	①	①
Acetic Acid	100%	Boiling	①	①	②	②	②	①	③	②	①	②	①	①	①	①
Acetic Anhydride	90%	70°	①	①	②	②	②	①	②	②	①	②	①	●	①	①
Acetic Anhydride	90%	Boiling	①	①	②	②	②	①	②	②	①	②	①	●	①	①
Acetic Vapors	30%	Hot	②	①	②	②	②	①	③	②	②	②	①	①	①	①
Acetic Vapors	100%	Hot	②	①	②	②	②	①	③	②	②	②	①	①	①	①
Acetone		70°	①	①	②	②	①	①	①	②	①	②	①	①	①	①
Acetone		Boiling	①	①	①	①	①	①	①	②	①	②	①	①	①	①
Acetylene		70°	①	①	①	①	②	①	①	②	●	①	①	①	①	①
Acid Mine Water	All	200°	①	①	①	⊗	⊗	①	⊗	●	②	●	①	③	①	①
Alcohol	3½ - 4½ %	160°	①	①	①	①	①	①	①	②	①	②	①	①	①	①
Amyl Alcohol	All	200°	①	①	①	①	①	①	①	②	①	②	①	①	①	①
Butyl Alcohol	All	200°	①	①	①	①	①	①	①	②	①	②	①	①	①	①
Alcohol, 2-Aminoethanol	All	200°	①	①	①	①	①	①	①	②	①	②	●	①	①	①
Alcohol, Ethyl		70°	①	①	①	①	②	①	①	②	①	②	①	①	①	①
Alcohol, Ethyl		Boiling	①	①	①	①	②	①	①	②	①	②	①	①	①	①
Alcohol, Methyl		70°	①	①	①	①	②	①	①	②	①	②	①	①	①	①
Alcohol, Methyl		150°	①	①	①	①	②	①	①	②	①	②	①	①	①	①
Aluminum		Molten	③	③	③	③	③	●	⊗	⊗	⊗	⊗	⊗	⊗	⊗	●
Aluminum Acetate	Saturated	70°	①	①	●	●	②	①	●	●	●	●	●	●	●	●
Aluminum Acetate	Saturated	Boiling	①	①	●	●	②	①	●	●	●	●	●	●	●	●
Aluminum Chloride	25%	70°	①	③	③	②	②	①	②	②	①	②	①	①	①	①

OSECO CORROSION DATA SURVEY

LEGEND			H A S T C	3 1 6	I N C	N I C K E L	M O N E L	T A N T A L U M	A L U M I N U M	S I L V E R	T I T A N I U M	P L A T I N U M	T E F L O N	R Y T O N	G R A P H I T E
Media	Concentration	Temp. °F	1 - GOOD	2 - FAIR	3 - POOR	⊗ - NOT RECOMMENDED	● - NO DATA								
Aluminum Chloride	Saturated	70°	1	3	3	2	2	1	2	2	1	2	1	1	1
Aluminum Fluoride		70°	2	3	●	●	3	⊗	●	2	1	2	⊗	●	●
Aluminum Hydroxide	Saturated	70°	2	1	●	●	3	1	2	●	●	●	●	3	●
Alum. Potassium Sulphate	2% & 10%	70°	2	1	●	●	3	1	3	3	●	2	●	●	●
Alum. Potassium Sulphate	2% & 10%	Boiling	2	1	●	●	3	1	3	3	●	2	●	●	●
Alum. Potassium Sulphate	Saturated	Boiling	2	1	⊗	⊗	3	1	3	3	●	2	●	●	●
Aluminum Sulphate	10%		1	1	1	3	2	1	2	●	2	2	1	1	1
Aluminum Sulphate	Saturated	70°	2	1	1	3	3	1	⊗	●	2	2	1	1	1
Aluminum Sulphate	10%	Boiling	1	1	1	3	3	1	3	●	2	2	1	1	1
Aluminum Sulphate	Saturated	Boiling	1	1	1	3	3	1	⊗	2	2	2	1	1	1
Ammonia (Dry)	All	70°/212	1	1	1	1	3	2	1	2	⊗	2	1	●	1
Ammonia Liquor		70°	1	1	1	1	3	2	1	2	⊗	2	1	●	1
Ammonia (Moist)	All	70°/212°	1	1	1	1	⊗	2	⊗	2	⊗	2	1	●	1
Ammonium Bicarbonate		70°	2	1	●	●	3	1	●	●	1	2	●	●	●
Ammonium Bicarbonate		Hot	3	1	●	●	3	1	●	●	1	2	●	●	●
Ammonium Carbonate	1% & 5%	70°	2	1	3	3	3	1	2	2	●	2	●	●	●
Ammonium Carbonate	Aerated	70°	2	1	3	3	3	1	2	2	●	2	●	●	●
Ammonium Chloride	1%	70°	1	1	1	1	1	1	2	2	1	2	1	1	1
Ammonium Chloride	1%/28/50%	Boiling	1	1	3	2	2	1	2	2	1	2	1	1	1
Ammonium Hydroxide		70°	2	1	1	⊗	⊗	3	3	2	1	●	1	3	1
Ammonium Nitrates	All	70°	2	1	1	3	3	1	2	2	1	2	1	1	●
Ammonium Nitrates	Saturated	Boiling	3	1	1	3	3	1	2	2	1	2	1	1	●
Ammonium Oxolate	5%	70°	2	1	3	⊗	2	1	3	●	1	2	●	●	●
Ammonium Perchlorate	5%	70°	2	1	●	●	●	2	●	●	1	2	●	●	●
Ammonium Persulphate	5%	70°	2	1	1	⊗	⊗	1	3	2	●	2	●	●	●
Ammonium Phosphate	5%	70°	1	1	1	3	2	1	3	2	●	2	●	●	●
Ammonium Phosphate	Saturated	70°	1	1	1	3	2	1	3	2	●	2	●	●	●
Ammonium Sulphate	1% & 5%	70°	2	1	2	2	2	1	3	2	1	2	1	1	●

OSECO CORROSION DATA SURVEY

LEGEND			H	A	I	N	M	T	A	S	T	P	T	G	
① - GOOD ② - FAIR ③ - POOR ⊗ - NOT RECOMMENDED ● - NO DATA			A	S	I	N	M	T	A	S	T	P	T	G	
Media	Concentration	Temp. °F	6	1	6	0	0	4	0	0	0	0	0	0	
			C	6	C	0	0	0	M	U	M	R	U	E	
Borax	5%	Hot	①	①	①	②	②	⊗	②	●	●	●	①	①	●
Boric Acid	5%	Hot	①	①	①	②	②	①	②	②	①	②	①	●	①
Boric Acid	Saturated	Boiling	①	①	①	②	②	①	②	②	①	②	①	●	①
Bromine		70°	③	③	②	①	③	①	③	③	⊗	⊗	①	⊗	⊗
Buttermilk		70°	①	①	①	①	①	①	③	●	●	●	●	●	●
Butyl Acetate		200°	②	②	②	②	②	①	①	②	①	②	①	①	①
Butyric Acid	5%	70°	①	①	①	①	②	①	③	②	①	②	●	●	●
Butyric Acid	5%	150°	②	①	①	①	③	①	③	②	①	②	●	●	●
Butyric Acid, Aeq. Sol.	SG 0.964	Boiling	③	①	②	③	③	①	●	②	①	②	●	●	●
Calcium Carbonate		70°	②	①	●	●	②	①	②	③	①	②	●	●	●
Calcium Chlorate	Dilute Sol.	70°	②	①	②	②	②	①	⊗	②	●	②	●	●	●
Calcium Chlorate	Dilute Sol.	Hot	②	①	②	②	②	①	⊗	②	●	②	●	●	●
Calcium Chloride	Dilute Sol.	70°	①	①	①	①	②	①	③	②	①	②	①	①	①
Calcium Chloride	Concentrated Sol.	70°	①	①	①	①	②	①	③	②	①	②	①	①	①
Calcium Hydroxide	10%	Boiling	①	①	①	①	②	①	⊗	②	①	●	●	●	●
Calcium Hydroxide	20%	Boiling	①	①	①	①	②	①	⊗	②	①	●	●	●	●
Calcium Hydroxide	50%	Boiling	①	①	①	①	②	①	⊗	②	①	●	●	●	●
Calcium Hypochlorite	2%	70°	①	①	②	③	⊗	①	⊗	●	①	②	●	●	●
Calcium Sulphate	Saturated	70°	②	①	③	③	③	①	③	②	●	②	①	①	●
Carbolic Acid	CP	70°	①	①	①	①	②	①	②	②	●	②	●	●	●
Carbolic Acid	CP	Hot	①	①	①	①	②	①	②	②	●	②	●	●	●
Carbon Bisulphide		70°	②	①	●	③	③	①	①	③	●	②	①	●	●
Carbon Dioxide (dry)		70°	①	①	①	①	①	①	②	③	①	②	①	①	●
Carbon Disulphide		70°	①	①	①	②	②	①	①	①	①	①	①	①	①
Carbon Monoxide Gas		1400°	③	①	②	②	③	①	①	①	●	①	●	●	●
Carbon Monoxide Gas		1600°	③	①	②	②	③	①	①	①	●	①	●	●	●
Carbon Tetrachloride	CP (dry)	70°	①	①	①	①	①	①	③	②	①	①	①	●	①
Carbon Tetrachloride	CP (dry)	Boiling	②	①	①	①	②	①	③	②	①	①	①	●	①

OSECO CORROSION DATA SURVEY

LEGEND			H A S T C	3 1 6	I N C	N I C K E L	M O N E L	T A N T A L U M	A L U M I N U M	S I L V E R	T I T A N I U M	P L A T I N U M	T E F L O N	R Y T O N	G R A P H I T E
Media	Concentration	Temp. °F	1 - GOOD	2 - FAIR	3 - POOR	⊗ - NOT RECOMMENDED	● - NO DATA								
Carbon Tetrachloride	10% Aerated	70°	1	1	1	1	1	1	3	2	1	1	1	●	1
Carbonic Acid		70°	1	2	1	1	3	1	1	1	●	2	●	●	1
Chlorascetic Acid		70°	1	3	2	2	3	1	⊗	1	1	1	1	●	1
Chloric Acid		70°	2	3	3	3	⊗	1	⊗	⊗	●	2	●	●	●
Chlorobenzene (dry)		70°	3	3	3	3	3	2	●	2	●	2	1	3	1
Chlorosulfonic Acid		200°	●	2	2	1	2	1	●	●	2	●	●	⊗	1
Chlorinated Water	Saturated	70°	1	2	3	3	2	1	●	●	●	●	●	●	●
Chlorine Gas	Dry	70°	1	2	1	1	2	1	2	1	⊗	⊗	1	⊗	1
Chlorine Gas	Moist	70°	1	3	1	1	3	1	3	1	⊗	⊗	1	⊗	●
Chloroform	Dry	70°	2	1	2	2	1	1	1	2	1	1	1	3	●
Chromic Acid	CP 10%	70°	1	1	2	2	⊗	1	3	2	1	1	1	⊗	●
Chromic Acid	CP 10%	Boiling	2	1	3	⊗	⊗	1	3	2	1	1	1	⊗	●
Chromic Acid	CP 50%	Boiling	3	2	3	⊗	⊗	1	⊗	2	1	1	1	⊗	●
Chromic Acid (Cont. SO ₃)	50% Com.	70°	3	2	2	2	⊗	1	●	2	1	1	1	⊗	●
Chromic Acid (Cont. SO ₃)	50% Com.	Boiling	3	3	3	⊗	⊗	1	⊗	2	1	1	1	⊗	●
Chromium Plating Bath		70°	1	1	●	●	⊗	1	●	2	●	●	●	●	●
Cider		70°	1	1	●	●	1	1	●	●	●	●	●	●	●
Citric Acid	10%	70°	1	1	1	2	2	1	1	2	1	2	1	●	1
Citric Acid	25%	70°	1	1	1	2	2	1	2	2	1	2	1	●	1
Citric Acid	50%	70°	1	1	1	2	2	1	2	2	1	2	1	●	1
Citric Acid	10%	Boiling	1	1	1	2	3	1	3	2	1	2	1	●	1
Citric Acid	25%	Boiling	1	1	1	2	3	1	3	2	1	2	1	●	1
Citric Acid	50%	Boiling	1	1	1	2	3	1	3	2	1	2	1	●	1
Coffee		Boiling	1	1	●	●	1	1	●	●	●	●	●	●	●
Copper Acetate	Saturated	70°	2	1	3	3	3	1	⊗	2	●	2	●	●	●
Copper Carbonate	Sat in 50% NH ₄ OH	70°	2	1	1	1	⊗	1	⊗	2	1	2	1	●	1
Copper Chloride	1% Aerated	70°	1	1	3	3	⊗	1	⊗	⊗	●	1	●	●	●
Copper Chloride	5% Aerated	70°	1	2	3	3	⊗	1	⊗	⊗	●	1	●	●	●

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LEGEND			H	A	I	N	M	T	A	S	T	P	T	G
			A	3	I	C	O	A	A	S	T	P	T	G
			S	1	N	K	N	N	L	I	I	A	F	R
			T	6	C	E	E	T	U	V	N	T	E	A
			C	6	0	L	L	A	M	E	I	I	L	P
			2	S	0	2	4	U	I	U	N	N	Y	R
			7	S	0	0	0	L	I	N	I	T	T	A
			6	T	0	0	0	M	M	R	M	M	O	P
Media	Concentration	Temp. °F	6	6	0	0	0	0	0	0	0	0	0	0
Copper Cyanide	Saturated	Boiling	①	①	⊗	⊗	⊗	①	⊗	⊗	②	②	●	●
Copper Nitrate	5%	70°	②	①	③	⊗	⊗	①	⊗	②	①	②	①	●
Copper Nitrate	50%	Boiling	⊗	①	③	⊗	⊗	①	⊗	②	①	②	①	●
Copper Sulphate	5% Aerated	70°	①	①	③	③	③	①	⊗	②	②	②	①	①
Copper Sulphate	Saturated	Boiling	①	①	③	③	③	①	⊗	②	②	②	①	①
Cottonseed Oil		70°	①	①	●	●	①	●	①	●	●	●	①	①
Creosote (Coal Tar)		Hot	②	①	①	①	②	①	③	●	●	①	①	●
Cyanogen Gas		70°	●	①	●	●	②	②	●	②	●	②	●	●
Dichloroethane		Boiling	②	①	②	①	②	●	●	●	●	●	●	●
Epsom Salt (Mag. Sulp.)		70°	①	①	●	●	①	①	●	●	●	●	●	●
Ether		70°	②	①	①	①	②	①	①	②	①	①	①	①
Ethyl Acetate		200°	③	③	③	③	③	①	①	②	●	②	①	①
Ethyl Alcohol	10-100 %	70°	①	①	①	①	②	①	①	②	●	①	①	①
Ethyl Chloride	Dry	70°	②	①	①	①	②	①	③	②	●	②	①	③
Ethylene Glycol	Concentrated	70°	①	①	①	①	②	①	③	①	②	①	①	①
Fatty Acids	100%	70°	①	①	①	①	②	①	③	②	①	②	①	●
Ferric Chloride	All	70°	①	③	②	②	③	①	⊗	②	①	③	①	①
Ferric Hydroxide		70°	②	①	●	●	②	①	●	●	●	②	①	●
Ferric Nitrate	All	70°	①	①	③	⊗	⊗	①	⊗	●	●	●	●	●
Ferric Sulphate	10% & 50%	70°	①	②	②	③	②	①	⊗	②	●	●	●	●
Ferrous Chloride	Saturated	70°	②	②	③	③	⊗	①	⊗	②	①	②	①	●
Ferrous Sulphate	10%	70°	②	①	②	①	②	①	⊗	●	①	②	①	●
Ferrous Sulphate	10%	Boiling	②	①	②	①	⊗	①	⊗	⊗	①	②	①	●
Fluorine Gas		70°	①	③	①	①	③	⊗	①	⊗	①	①	⊗	●
Fluorosilicic Acid	25%	70°	①	⊗	⊗	⊗	①	⊗	⊗	②	⊗	②	●	①
Formaldehyde	37%	200°	①	①	①	①	①	①	③	②	⊗	①	①	①
Formalin	40% Formaldehyde	70°	②	①	●	●	②	②	⊗	②	●	②	●	●
Formic Acid	5%	70°	①	①	①	②	②	①	③	②	①	②	①	●

OSECO CORROSION DATA SURVEY

LEGEND			H	A	I	N	M	T	A	S	T	P	T	G	
			A	3	I	C	O	A	A	S	T	P	T	G	
			S	1	N	I	N	N	L	I	I	A	E	R	
			T	6	C	K	E	T	U	V	N	T	L	A	
			2	6	2	2	4	U	E	I	I	I	0	0	
			7	S	0	0	0	M	M	R	U	N	0	0	
			6	T	0	0	0								
Media	Concentration	Temp. °F	C	6	0	0	0								
Formic Acid	10%	70°	①	①	①	②	②	①	⊗	②	②	②	①	●	①
Formic Acid	50%	70°	①	①	②	②	②	①	⊗	②	②	②	①	●	①
Formic Acid	100%	70°	①	①	②	②	②	①	⊗	②	②	②	①	●	①
Formic Acid	10%	Boiling	①	①	②	②	②	①	⊗	②	②	②	①	●	①
Formic Acid	50%	Boiling	①	①	②	②	②	①	⊗	②	②	②	①	●	①
Formic Acid	100%	Boiling	①	①	②	②	②	①	⊗	②	②	②	①	●	①
Freon	Dry	70°	●	③	②	①	①	●	③	●	●	●	①	⊗	●
Fruit Juices		70°	①	①	①	②	①	①	③	①	①	①	①	●	①
Fuel Oil		Hot	①	①	①	②	①	①	●	●	●	●	①	●	●
Furfural		70°	②	①	③	③	②	①	③	②	①	②	①	●	●
Gallic Acids	5%	70°	②	①	②	③	②	①	③	②	●	②	●	●	●
Gallic Acids	5%	150°	②	①	②	③	②	①	③	②	●	②	●	●	●
Gallic Acids	Sat. @ 212 F	Boiling	②	①	②	③	②	①	③	②	●	②	●	●	●
Gasoline		70°	①	①	①	①	①	①	①	●	●	●	①	①	●
Gelatine		70°	①	①	①	①	①	①	①	②	①	①	①	●	①
Glue	Dry	70°	①	①	●	●	①	①	②	●	●	●	●	●	●
Glue	Solution Acid	70°-140°	①	①	●	●	①	①	②	●	●	●	●	●	●
Glycerine		70°	①	①	②	②	①	①	①	②	①	②	●	●	●
Hydrobromic Acid	To 50%	70°	②	③	⊗	⊗	⊗	①	⊗	②	①	③	①	●	①
Hydrobromic Acid	Greater than 50%	70°	②	③	⊗	⊗	⊗	①	⊗	②	●	③	●	●	●
Hydrochloric Acid	To 10%	70°	①	③	②	②	③	①	⊗	⊗	⊗	②	①	⊗	①
Hydrochloric Acid	Greater than 10%	70°	①	③	③	②	③	①	⊗	⊗	⊗	②	①	⊗	①
Hydrocyanic Acid		70°	②	①	③	③	②	①	⊗	②	●	②	①	●	①
Hydrofluoric Acid	To 75%	70°	②	③	③	②	①	①	⊗	②	⊗	①	①	●	①
Hydrofluoric Acid	Greater than 75%l	70°	②	③	③	③	①	⊗	⊗	②	⊗	①	①	●	①
Hydrofluosilicic Acid		70°	②	③	②	②	②	⊗	⊗	●	●	●	●	⊗	●
Hydrogen Peroxide		70°	①	①	②	②	②	①	①	⊗	①	①	①	③	①
Hydrogen Peroxide		Boiling	①	①	②	②	②	①	①	⊗	①	①	①	③	①

OSECO CORROSION DATA SURVEY

<i>LEGEND</i>			H	A	I	N	M	T	A	S	T	P	T	R	G
			A	3	I	C	O	A	A	S	I	A	P	T	R
			S	1	N	K	N	N	L	I	T	L	A	F	A
			T	6	C	E	E	T	A	I	A	I	N	L	P
			C	6	C	L	L	A	L	V	N	I	N	L	O
			2	S	6	2	4	U	M	E	R	U	M	O	N
			7	S	0	0	0	L	M	R	M	M	N	N	T
			6	T	0	0	0	M	M	R	M	M	N	N	E
Media	Concentration	Temp. °F													
Hydrogen Sulphide	Dry	70°	①	①	①	①	⊗	①	①	⊗	①	②	①	①	①
Hydrogen Sulphide	Wet	70°	①	①	①	②	⊗	①	②	⊗	①	②	①	①	①
Iodine		70°	①	③	①		①	●	③	②	①	②	●	●	●
Kerosene		70°	①	①	①	①	①	①	①	●	●	●	①	①	●
Ketchup		70°	①	①	●	●	①	①	⊗	●	●	●	●	●	●
Lactic Acid	1,5 & 10%	70°	②	①	①	②	⊗	①	③	②	②	②	①	①	①
Lactic Acid	1%	Boiling	②	①	②	③	⊗	①	⊗	②	②	②	①	①	①
Lactic Acid	5%	Boiling	②	①	②	③	⊗	①	⊗	②	②	②	①	①	①
Lactic Acid	10%	Boiling	②	①	②	③	⊗	①	⊗	②	②	②	①	①	①
Lard		70°	①	①	●	●	①	①	①	●	●	●	●	●	●
Lead	Molten	1000°	⊗	③	⊗	⊗	⊗	●	⊗	⊗	⊗	⊗	⊗	●	●
Lead Acetate	5%	Boiling	②	①	②	③	②	①	⊗	●	①	●	●	●	①
Linseed Oil		70°	①	①	②	②	①	①	①	②	●	②	●	●	●
Lysol		70°	①	①	●	●	①	①	●	●	●	●	●	●	●
Magnesium Carbonate	All	70°	②	①	③	③	②	①	⊗	②	●	②	●	●	●
Magnesium Chloride	1 & 5%	70°	①	①	①	①	①	①	⊗	⊗	②	②	①	①	●
Magnesium Chloride	1 & 5%	Hot	①	①	①	①	①	①	⊗	⊗		②	①	①	●
Magnesium Hydroxide		70°	①	①	①	①	②	①	②	●	①	●	①	①	●
Magnesium Nitrate	All	70°	①	①	③	③	②	①	③	②	●	②	●	●	●
Magnesium Sulphate	10%	70°	②	①	②	②	①	①	③	●	①	②	●	●	●
Magnesium Sulphate	10%	Boiling	②	①	③	②	①	①	③	●	①	②	●	●	●
Malic Acid	Cold & Hot		②	①	③	③	②	①	③	②	②	②	●	●	①
Mayonnaise		70°	①	①	●	●	①	①	●	●	●	●	●	●	●
Mercury			①	①	①	①	②	②	⊗	②	①	②	①	●	①
Mercury Chloride	Dil. Solution	70°	②	③	⊗	⊗	⊗	①	⊗	⊗	●	②	●	●	●
Methanol		70°	①	①	①	①	①	②	①	②	①	②	①	●	①
Methanol		150°	①	①	①	①	①	②	①	②	①	②	①	●	①
Methylene Chloride		200°	①	⊗	①	①	①	①	●	②	①	①	①	⊗	①

OSECO CORROSION DATA SURVEY

LEGEND			H	A	I	N	M	T	A	S	T	P	T	G	
			A	3	I	C	O	A	A	S	I	P	T	R	
			S	1	N	K	N	N	L	I	T	A	E	A	
			T	6	C	E	E	T	U	V	N	T	L	P	
			C	6	C	L	L	A	M	E	I	I	N	R	
			2	S	6	2	4	L	U	0	U	N	F	R	
			7	S	0	0	0	U	M	0	M	L	T	O	
			6	T	0	0	0	M	M	0	M	N	N	E	
Media	Concentration	Temp. °F	1	2	3	⊗	●	1	2	3	⊗	1	2	3	
Milk	(Fresh or Sour)	Cold/Hot	1	1	1	2	1	1	2	2	1	1	1	●	1
Mineral Oil		200°	1	1	1	1	1	1	1	1	●	1	1	1	1
Sulfuric/Nitric Acid Mix	50/50 Wt. %	Cold	2	1	3	⊗	3	1	⊗	⊗	2	2	1	⊗	⊗
Sulfuric/Nitric Acid Mix	50/50 Wt. %	200°	⊗	1	3	⊗	⊗	1	⊗	⊗	2	2	1	⊗	⊗
Sulfuric/Nitric Acid Mix	50/50 Wt. %	Boiling	⊗	2	3	⊗	⊗	1	⊗	⊗	2	2	1	⊗	⊗
Sulfuric/Nitric/Water Mix	70/10/20 Wt. %	Cold	2	1	3	⊗	3	1	⊗	⊗	2	2	1	⊗	⊗
Sulfuric/Nitric/Water Mix	70/10/20 Wt. %	200°	⊗	1	3	⊗	⊗	1	⊗	⊗	2	2	1	⊗	⊗
Sulfuric/Nitric/Water Mix	70/10/20 Wt. %	Boiling	⊗	3	⊗	⊗	⊗	1	⊗	⊗	2	2	1	⊗	⊗
Sulfuric/Nitric/Water Mix	15/5/80 Wt. %	200°	⊗	1	⊗	⊗	⊗	1	⊗	⊗	2	2	1	⊗	⊗
Sulfuric/Nitric/Water Mix	15/5/80 Wt. %	Boiling	⊗	1	⊗	⊗	⊗	1	⊗	⊗	2	2	1	⊗	⊗
Molasses			1	1	1	1	2	1	3	1	1	1	1	●	1
Molybic Acid	5%	70°	3	1	3	3	●	1	●	2	●	2	●	●	●
Muratic Acid		70°	1	3	3	3	3	1	⊗	●	●	●	●	●	●
Mustard		70°	1	1	●	●	1	1	●	●	●	●	●	●	●
Naptha Crude		70°	2	1	1	1	2	1	1	1	●	2	1	3	1
Naptha Pure		70°	2	1	1	1	2	1	1	1	●	2	1	3	1
Nickel Chloride Solution		70°	1	1	2	2	2	1	⊗	2	1	2	●	●	1
Nickel Sulphate Solution		70°	2	1	2	1	2	1	⊗	2	1	2	1	●	1
Nitric Acid	To 25%	70°	1	1	2	⊗	⊗	1	⊗	⊗	1	1	1	⊗	⊗
Nitric Acid	Greater than 25%	70°	1	1	⊗	⊗	⊗	1	⊗	⊗	1	3	1	⊗	⊗
Nitric Acid	5%	Boiling	⊗	1	2	⊗	⊗	1	⊗	⊗	1	1	1	⊗	1
Nitric Acid	Concentrated	Boiling	⊗	1	⊗	⊗	⊗	1	⊗	⊗	1	3	1	⊗	⊗
Nitric Acid	Fuming Conc.	70°	2	1	2	⊗	⊗	1	⊗	⊗	1	3	1	⊗	⊗
Nitric Acid	Fuming Conc.	Boiling	⊗	3	⊗	⊗	⊗	1	⊗	⊗	1	3	1	⊗	⊗
Nitrous Acid	5%	70°	⊗	1	2	3	⊗	1	3	●	●	2	●	●	●
Oils, Crude		Cold/Hot	1	1	1	1	1	1	1	1	1	1	1	●	1
Oils, Veg. & Mineral		Cold/Hot	1	1	1	1	1	1	1	1	1	1	1	●	1
Oleic Acid		70°	2	1	3	3	1	1	1	2	3	2	●	●	●

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LEGEND			H A S T C	3 1 6	I N C	N I C K E L	M O N E L	T A N T A L U M	A L U M I N U M	S I L V E R	T I T A N I U M	P L A T I N U M	T E F L O N	R Y T O N	G R A P H I T E
Media	Concentration	Temp. °F	1 - GOOD	2 - FAIR	3 - POOR	⊗ - NOT RECOMMENDED	● - NO DATA								
Oleic Acid		300°	3	1	3	3	2	1	1	2	3	2	●	●	●
Oleic Acid		400°	3	1	3	3	2	1	1	2	3	2	●	●	●
Oxalic Acid	5%	70°	2	1	1	1	2	1	3	2	3	2	●	●	1
Oxalic Acid	10%	70°	2	1	1	1	2	1	3	2	3	2	●	●	1
Oxalic Acid	10%	Boiling	2	2	1	2	2	1	3	2	3	2	●	●	1
Oxalic Acid	25%	Boiling	2	2	2	3	2	1	3	2	3	2	●	●	1
Oxalic Acid	50%	Boiling	2	2	2	3	2	1	3	2	3	2	●	●	1
Oxygen			1	1	1	1	1	⊗	1	1	1	1	1	1	1
Paraffin		Cold/Hot	2	1	●	●	2	1	1	●	●	●	●	●	1
Petroleum Ether			1	1	●	●	1	1	1	●	●	●	●	●	●
Phenol	CP	70°	1	1	3	3	2	1	3	2	2	2	1	1	1
Phenol	CP	Hot	1	1	3	3	2	1	3	2	2	2	1	1	1
Phenolic Resins		Cold/Hot	1	1	3	3	1	1	3	2	2	2	1	1	1
Phosphoric Acid	1 & 5%	70°/Boil	1	1	1	2	2	1	3	1	3	1	1	3	1
Phosphoric Acid	10% Still	70°	1	1	1	2	2	1	3	1	3	1	1	3	1
Phosphoric Acid	10%	Boiling	1	2	⊗	⊗	2	1	3	1	3	1	1	3	1
Phosphoric Acid	50%	Boiling	1	3	⊗	⊗	2	1	⊗	1	3	1	1	3	1
Phosphoric Trichloride		70°						●	●		1		1	1	●
Picric Acid		70°	1	1	⊗	⊗	⊗	1	3	2	●	2	1	●	1
Pine Tar Oil		Cold/Hot	1	1	●	●	1	1	●	●	●	●	●	●	●
Potassium Bichromate	25%	70°	1	1	●	●	2	2	1	2	●	2	●	●	●
Potassium Bichromate	25%	Boiling	1	1	●	●	2	2	1	2	●	2	●	●	●
Potassium Bromide		70°	2	1	1	1	2	1	3	2	1	2	●	●	●
Potassium Carbonate	Solution	70°/Boil	2	1	1	1	2	1	3	2	●	2	●	●	●
Potassium Chlorate	Saturated	Boiling	2	1	1	2	⊗	1	2	2	●	2	●	●	●
Potassium Chloride	1 & 5%	70°	1	1	1	2	2	1	3	2	1	2	1	1	●
Potassium Chloride	1 & 5%	Boiling	1	1	1	2	2	1	3	2	1	2	1	1	●
Potassium Dichromate	All	Cold/Hot	2	1	2	3	2	1	1	2	1	2	●	●	●

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<i>LEGEND</i>			H	A	I	N	M	T	A	S	T	P	T	T	G
			A	3	I	C	O	A	A	S	I	P	T	R	A
			S	1	N	K	N	N	L	I	L	A	T	E	Y
			T	6	C	E	E	T	A	V	I	F	L	T	O
			2	S	6	2	4	L	I	U	N	N	N	N	N
			7	S	0	0	0	U	M	M	M	O	N	N	N
			6	T	0	0	0	M	M	R	M	N	N	N	N
Media	Concentration	Temp. °F													
Potassium Ferricyanide	5%	70°	②	①	②	②	②	①	①	⊗	①	②	●	●	●
Potassium Ferricyanide	5 & 25%	Boiling	②	①	②	②	②	①	②	⊗	①	②	●	●	●
Potassium Ferrocyanide		70°	②	①	②	②	②	①	②	⊗	①	②	●	●	●
Potassium Hydroxide	5%	70°	②	①	①	①	①	①	⊗	②	①	②	①	⊗	●
Potassium Hydroxide	27 & 50%	Boiling	②	①	①	①	①	⊗	⊗	②	①	②	①	⊗	●
Potassium Iodide	All	Cold/Hot	①	①	③	③	②	⊗	①	⊗	①	②	●	●	●
Potassium Nitrate	50%	70°	②	①	③	③	②	①	①	②	●	②	●	●	●
Potassium Nitrate	50%	Boiling	②	①	③	③	②	①	①	②	●	②	●	●	●
Potassium Oxalate			②	①	②	②	②	①	⊗	●	●	②	●	●	●
Potassium Permanganate	5%	70°	①	①	②	①	②	①	②	⊗	①	②	①	⊗	●
Potassium Permanganate	5%	Boiling	②	①	②	①	②	①	②	⊗	①	②	①	⊗	●
Potassium Sulphate	1%	70°	①	①	①	①	①	①	①	②	①	②	●	●	●
Potassium Sulphate	5%	70°	①	①	①	①	①	①	①	②	①	②	●	●	●
Potassium Sulphate	5%	Hot	①	①	①	①	①	①	①	②	①	②	●	●	●
Propane	100%		①	①	①	①	①	①	①	●	●	●	●	●	●
Pyrogallic Acid			②	①	②	①	②	①	⊗	●	①	②	●	●	●
Pyridine		200°						●	②			②	①	③	①
Quinine Bisulphate	Dry		②	①	●	●	②	①	●	②	●	②	●	●	●
Quinine Sulphate	Dry		②	①	●	●	②	①	●	②	●	②	●	●	●
Rosin		Molten	②	①	①	①	②	①	①	③	●	③	●	●	●
Sauerkraut Brine		70°	①	①	●	●	①	●	③	●	●	●	●	●	●
Sea Water		70°	①	①	②	③	①	①	②	①	①	②	①	●	①
Sewage			①	①	●	●	①	①	③	●	●	●	①	①	①
Silver Bromide			①	①	③	③	②	①	⊗	②	●	②	●	●	●
Silver Chloride			①	③	③	③	②	①	●	②	●	②	●	●	●
Silver Nitrate	10%	70°	①	①	①	⊗	⊗	①	⊗	②	①	②	①	●	①
Silver Nitrate	10%	Boiling	②	①	①	⊗	⊗	①	⊗	②	①	②	①	●	①
Soaps		70°	①	①	●	●	①	①	●	●	●	●	●	●	●

OSECO CORROSION DATA SURVEY

LEGEND			H A S T	3 1 6	I N C	N I C K E L	M O N E L	T A N T A L U M	A L U M I N U M	S I L V E R	T I T A N I U M	P L A T I N U M	T E F L O N	R Y T O N	G R A P H I T E
Media	Concentration	Temp. °F	1 - GOOD	2 - FAIR	3 - POOR	⊗ - NOT RECOMMENDED	● - NO DATA								
Sodium Acetate	Moist		1	1	1	1	1	1	1	2	1	2	●	●	●
Sodium Bicarbonate	All	70°	3	3	3	3	3	1	⊗	●	●	2	1	1	●
Sodium Bicarbonate	5%	150°	3	3	3	3	3	1	⊗	●	●	2	1	1	●
Sodium Bichromate			3	3	3	3	3	1	⊗	●	●	2	1	●	●
Sodium Bisulphate	10%	70°	2	1	3	3	2	1	3	2	1	2	●	●	●
Sodium Bisulphate	10%	Boiling	2	1	3	3	2	1	3	2	1	2	●	●	●
Sodium Carbonate	5%	Boiling	1	1	1	1	1	1	3	2	1	2	1	1	1
Sodium Carbonate	50%	Boiling	1	1	1	1	1	1	3	2	1	2	1	1	1
Sodium Carbonate	Molten	1650°	3	3	3	⊗	3	⊗	⊗	⊗	⊗	⊗	1	1	1
Sodium Chlorate	25%	Cold/Hot	1	1	●	●	1	1	⊗	2	1	2	●	●	●
Sodium Chloride	All	70°	1	1	1	1	1	1	3	2	1	2	1	1	●
Sodium Chloride	Saturated	70°/Boil	1	1	1	1	1	1	⊗	2	1	2	1	1	●
Sodium Chromate		200°	3	⊗	⊗	⊗	⊗	2	⊗	2	●	2	1	1	●
Sodium Citrate	All	Cold/Hot	3	⊗	⊗	⊗	⊗	1	⊗	2	1	2	●	3	●
Sodium Fluoride	5%		2	1	2	1	1	⊗	3	●	2	●	●	●	●
Sodium Hydroxide	15%	200°	2	3	1	1	3	⊗	⊗	2	2	2	1	3	●
Sodium Hydroxide	20 & 30%	70°	1	1	1	1	3	⊗	⊗	2	2	2	1	3	1
Sodium Hydroxide	20%	Boiling	3	1	1	1	1	⊗	⊗	2	2	2	2	3	1
Sodium Hydroxide	30%	Boiling	3	1	1	1	1	⊗	⊗	2	2	2	1	3	●
Sodium Hydroxide	Molten	650°	⊗	1	1	1	1	⊗	⊗	2	2	2	1	3	●
Sodium Hypochlorite		70°	1	2	3	3	⊗	1	3	2	1	2	1	3	●
Sodium Hyposulphite		70°	2	1	3	3	●	1	3	●	●	●	●	●	●
Sodium Nitrate	All	Cold/Hot	2	1	1	1	2	1	1	2	1	2	●	●	●
Sodium Nitrite	All	Cold/Hot	2	1	1	1	2	1	●	●	●	●	●	●	●
Sodium Perchlorate	10%	70°	1	1	●	●	●	2	●	2	2	2	●	●	●
Sodium Perchlorate	10%	Boiling	1	1	●	●	●	2	●	2	2	2	●	●	●
Sodium Peroxide	10%	70°	2	1	1	2	2	3	⊗	⊗	●	2	1	●	●
Sodium Peroxide	10%	Boiling	2	1	1	2	2	3	⊗	⊗	●	2	1	●	●

OSECO CORROSION DATA SURVEY

<i>LEGEND</i>			H A S T C 2 7 6	3 1 6	I N C 6 0 0	N I C K E L 2 0 0	M O N E L 4 0 0	T A N T A L U M 2 0 0	A L U M I N U M 2 0 0	S I L V E R 2 0 0	T I T A N I U M 2 0 0	P L A T I N U M 2 0 0	T E F L O N 2 0 0	R Y T O N 2 0 0	G R A P H I T E 2 0 0
Media	Concentration	Temp. °F	①	②	③	⊗	●	○	○	○	○	○	○	○	○
Sodium Phosphate	5%	Cold/Hot	①	①	①	①	①	①	●	②	①	②	●	●	●
Sodium Sulfit	5%	70°	①	①	①	①	②	①	●	③	①	②	①	●	●
Sodium Sulfit	25 & 50%	Boiling	②	①	①	①	②	①	●	③	①	②	①	●	●
Sodium Sulphate	5%	70°	①	①	②	②	①	①	①	②	①	②	①	①	●
Sodium Sulphate	Saturated	Boiling	②	①	②	②	②	①	①	②	①	②	①	①	●
Sodium Sulphide	5%	70°	②	②	⊗	⊗	⊗	①	⊗	③	②	②	①	①	①
Sodium Sulphide	50%	Boiling	②	②	⊗	⊗	⊗	①	⊗	③	②	②	①	①	①
Sodium Thiosulphate	25%	70°	②	①	②	②	②	①	①	②	①	②	①	①	●
Sodium Thiosulphate	Saturated	70°/Boil	②	①	②	②	②	①	①	②	①	②	①	①	●
Stannic Chloride	S.G. 1.21	70°	②	②	⊗	②	⊗	①	⊗	②	②	②	①	●	①
Stannic Chloride	S.G. 1.21	Boiling	③	③	⊗	②	⊗	①	⊗	②	②	②	①	●	①
Stannous Chloride	Saturated	120°	②	①	⊗	⊗	②	①	⊗	●	●	●	●	●	●
Stannous Chloride	Saturated	Boiling	③	③	②	②	③	①	⊗	●	●	●	●	●	●
Steam			①	①	①	①	①	①	①	①	①	①	①	①	①
Stearic Acid		70°	①	①	⊗	⊗	⊗	①	①	②	②	②	●	●	●
Sugar Juice		Hot	①	①	①	①	①	①	①	①	①	①	①	●	①
Sulphur	Fused	265°	①	①	②	②	②	①	①	⊗	①	②	①	●	①
Sulphur	Boiling	830°	③	③	③	③	③	①	①	⊗	①	②	⊗	●	①
Sulphur Chloride		Cold/Hot	②	①	②	②	③	①	①	⊗	●	①	①	●	①
Sulphur Dioxide Gas	Dry	575°	①	①	②	②	③	①	①	⊗	①	①	⊗	①	①
Sulphur Dioxide Gas	Moist	70°	①	①	⊗	⊗	③	①	①	⊗	②	①	①	①	①
Sulphur Monochloride		70°	②	①	②	②	③	②	⊗	⊗	●	②	●	●	●
Sulphuric Acid	5%	70°	①	①	②	②	①	①	⊗	①	③	①	①	⊗	①
Sulphuric Acid	10%	70°	①	①	②	②	②	①	⊗	①	③	①	①	⊗	①
Sulphuric Acid	50%	70°	①	②	②	②	②	①	⊗	①	③	①	①	⊗	①
Sulphuric Acid	Concentrated	70°	①	①	⊗	⊗	⊗	①	⊗	⊗	⊗	①	①	⊗	⊗
Sulphuric Acid	Fuming	70°	②	①	⊗	⊗	⊗	⊗	⊗	⊗	⊗	①	①	⊗	⊗
Sulphuric Acid	5%	Boiling	②	②	②	②	⊗	①	⊗	①	⊗	①	①	⊗	①

OSECO CORROSION DATA SURVEY

<i>LEGEND</i>			H	A	I	N	M	T	A	S	T	P	T	G	
			A	3	I	C	O	A	A	S	I	P	T	R	
			S	1	N	K	N	N	L	I	T	A	E		
			T	6	C	E	L	T	A	L	A	T	F		
			C	6	0	0	0	L	U	V	N	I	L		
			2	S	6	2	4	U	M	E	I	U	N		
			7	S	0	0	0	M	M	R	I	M	N		
			6	T	0	0	0								
Media	Concentration	Temp. °F													
Sulphuric Acid	10%	Boiling	②	③	②	②	⊗	①	⊗	①	⊗	①	①	⊗	①
Sulphuric Acid	50%	Boiling	⊗	③	③	③	⊗	①	⊗	①	⊗	①	①	⊗	①
Sulphuric Acid	Concentrate	Boiling	⊗	②	⊗	⊗	⊗	⊗	⊗	⊗	⊗	●	①	⊗	①
Sulphurous Acid	Saturated	70°	②	①	⊗	⊗	⊗	①	⊗	⊗	①	②	①	⊗	⊗
Sulphurous Acid	150 psig	375°	③	①	⊗	⊗	⊗	①	⊗	⊗	①	②	①	⊗	●
Tannic Acid	10%	70°	②	①	②	①	②	①	③	①	①	①	①	●	①
Tannic Acid	50%	70°	②	①	②	①	②	①	③	①	①	①	①	●	●
Tannic Acid	10%	Boiling	②	①	②	①	②	①	③	●	①	●	●	●	①
Tannic Acid	50%	Boiling	②	①	②	①	②	①	③	●	①	●	●	●	●
Tanning Liquor		70°	①	①	●	●	●	●	③	●	●	●	●	●	●
Tar			①	①	①	②	②	●	②	●	●	●	●	●	●
Tartaric Acid	10%	70°	②	①	①	①	②	①	③	①	②	②	①	●	①
Tartaric Acid	50%	70°	②	①	①	①	②	①	③	①	②	②	①	●	①
Tartaric Acid	10%	Boiling	②	①	①	①	②	①	③	①	②	②	①	●	①
Tartaric Acid	50%	Boiling	②	①	①	①	②	①	③	①	②	②	①	●	①
Tin		Molten	●	③	⊗	⊗	⊗	①	●	⊗	⊗	⊗	⊗	●	●
Toluene		200°	●	①	①	①	①	②	①	②	●	●	①	③	●
Trichloroacetic Acid		70°	②	③	●	●	②	②	⊗	●	⊗	●	①	①	●
Trichlorethylene	Dry	70°	①	①	②	②	②	①	①	①	②	②	①	③	①
Turpentine		70°	①	①	●	●	①	①	①	②	●	②	①	①	●
Uric Acid		70°	②	①	●	●	②	①	①	①	①	①	①	●	①
Varnish		70°	①	①	①	①	①	①	●	●	●	●	●	●	●
Varnish		Hot	①	①	①	①	①	①	●	●	●	●	●	●	●
Vegetable Juices			①	①	①	②	①	①	①	●	●	●	●	●	●
Vinegar		70°	②	①	①	①	②	①	①	①	①	①	①	①	①
Vinegar		Hot	②	①	①	①	②	①	①	①	①	①	①	①	①
Water	Deionized	200°	①	①	①	①	①	①	①	①	①	①	①	①	①
Water	Sea	200°	①	②	②	③	②	①	②	①	①	①	①	①	①

