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Classification

0 = resistant to general corrosion (mass loss rate <0.1g/h m² corresponding to a corrosion rate <0.11mm thickness reduction/year)

1 = slight susceptibility to general corrosion, suitable for some applications (0.1–1.0 g/h · m² corresponding to 0.11–1.10 mm thickness reduction/year)

2 = low resistance to general corrosion, unsuitable for virtually all applications (1.0 –10.0 g/h · m² corresponding to 1.1–11.0 mm thickness reduction/year)

3 = no resistance to general corrosion (>10.0 g/h · m² corresponding to >11.0 mm thickness reduction/year) The following warning is provided for the major forms of localised corrosion

L = risk of pitting, crevice corrosion or stress-corrosion cracking, even in resistance class 0

Classification of ASTM grades by group

Gr. 4	Gr. 5
4301/304	4401/316
4303/(305)	4404/316 L
4306/304 L	4429/316 LN
4307/304 L	4435/316 L
4310/(301)	4436/316
4311/304 LN	4438/317 L
4315/304 N	4439
4318/301 LN	4462
4541/321	4501
4544	4561/316 Ti / 316 L
4546	4571/316 Ti
4550/347	

Table of steel grades

Material no.	Abbreviation as per EN 10 088-2	ASTM grade
1.4301	X 5 CrNi 18-10	304
1.4305	X 8 CrNiS 18-9	(305)
1.4571	X 6 CrNiMoTi 17-12-2	316 Ti

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Acetic acid	CH ₃ COOH		10%	20°C	0	0
Acetic acid	CH ₃ COOH		10%	boiling	0	0
Acetic acid	CH ₃ COOH		50%	20°C	0	0
Acetic acid	CH ₃ COOH		50%	boiling	1	0
Acetic acid with hydrogen peroxide	CH ₃ COOH + H ₂ O ₂		10 % and 50 %	20°C	0	0
Acetic acid with hydrogen peroxide	CH ₃ COOH + H ₂ O ₂		10 % and 50%	50°C	0	0
Acetic acid with hydrogen peroxide	CH ₃ COOH + H ₂ O ₂		10 % and 50%	90°C	0	0
Acetic anhydride	(CH ₃ CO) ₂ O			20°C	0	0
Acetic anhydride	(CH ₃ CO) ₂ O			boiling	0	0
Acetylchloride	CH ₃ COCl			boiling	1L	0L
Acetone	CH ₃ COCH ₃		all concentrations	20°C	0	0
Acetone	CH ₃ COCH ₃		all concentrations	boiling	0	0
Acetosalicic acid	HOCC ₆ H ₄ OCOCH ₃			20°C	0	0
Activin	see p-toluene sulfonchloramide sodium					
Alcohol	see methyl and ethyl alcohol					
Alum	see potassium aluminium sulphate					
Aluminium	Al	molten		750°C	3	3
Aluminium acetate	Al(CH ₃ COO) ₃	cold saturated		20°C	0	0
Aluminium acetate	Al(CH ₃ COO) ₃	cold and hot saturated		boiling	0	0
Aluminium ammonium sulphate	Al(NH ₄)(SO ₄) ₂ · 12H ₂ O		all concentrations	20°C	0	0
Aluminium ammonium sulphate	Al(NH ₄)(SO ₄) ₂ · 12H ₂ O	cold and hot saturated		boiling	3	2
Aluminium chloride	AlCl ₃ · 6H ₂ O		5%	50°C	2L	1L
Aluminium chloride	AlCl ₃ · 6H ₂ O		25%	20°C	3L	2L
Aluminium nitrate	Al(NO ₃) ₃ · 9H ₂ O			20°C	0	0
Aluminium sulphate	Al ₂ (SO ₄) ₃ · 18H ₂ O		10%	20°C	0	0
Aluminium sulphate	Al ₂ (SO ₄) ₃ · 18H ₂ O		10%	boiling	1	0
Aluminium sulphate	Al ₂ (SO ₄) ₃ · 18H ₂ O	cold saturated		20°C	1	0
Aluminium sulphate	Al ₂ (SO ₄) ₃ · 18H ₂ O	cold and hot saturated		boiling	2	1
Ammonia	NH ₃			50°C	0	0
Ammonium alum	see aluminium ammonium sulphate					
Ammonium bicarbonate	NH ₄ HCO ₃		all concentrations	20°C	0	0
Ammonium bifluoride	NH ₄ HF ₂	cold saturated		20°C	0	0
Ammonium carbonate	(NH ₄) ₂ CO ₃ · H ₂ O	cold saturated		20°C	0	0
Ammonium carbonate	(NH ₄) ₂ CO ₃ · H ₂ O	hot saturated		boiling	0	0
Ammonium chloride (sal ammoniac)	NH ₄ Cl		10%	boiling	0L	0L
Ammonium chloride (sal ammoniac)	NH ₄ Cl		25%	boiling	1L	1L
Ammonium chloride (sal ammoniac)	NH ₄ Cl		50%	boiling	2L	1L
Ammonium chloride (sal ammoniac)	NH ₄ Cl	cold saturated		20°C	0L	0L
Ammonium chloride (sal ammoniac)	NH ₄ Cl	cold and hot saturated		boiling	2L	1L

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Ammonium chloride (sal ammoniac)	NH ₄ Cl	cold saturated with copper and zinc chlorides		boiling	3L	3L
Ammonium hexachlorostannate (pink salt)	(NH ₄) ₂ (SnCl ₆)	cold saturated		20°C	1L	0L
Ammonium hexachlorostannate (pink salt)	(NH ₄) ₂ (SnCl ₆)			60°C	3L	3L
Ammonium hydroxide	NH ₄ OH		all concentrations	20°C and boiling	0	0
Ammonium nitrate	NH ₄ NO ₃ · 9H ₂ O	cold saturated		20°C	0	0
Ammonium nitrate	NH ₄ NO ₃ · 9H ₂ O	cold and hot saturated		boiling	0	0
Ammonium oxalate	(NH ₄) ₂ C ₂ O ₄ · H ₂ O	cold and hot saturated		20°C	0	0
Ammonium oxalate	(NH ₄) ₂ C ₂ O ₄ · H ₂ O	cold and hot saturated		boiling	0	0
Ammonium perchlorate	NH ₄ ClO ₄		10%	20°C	0	0
Ammonium perchlorate	NH ₄ ClO ₄			boiling	0	0
Ammonium sulphate	(NH ₄) ₂ SO ₄	cold saturated		20°C	0	0
Ammonium sulphate	(NH ₄) ₂ SO ₄	cold saturated		boiling	1	1
Ammonium sulphate	(NH ₄) ₂ SO ₄		with 5% sulphuric acid	100°C	1	1
Ammonium sulphite	(NH ₄) ₂ SO ₃	cold saturated		20°C	0	0
Ammonium sulphite	(NH ₄) ₂ SO ₃ · H ₂ O	cold and hot saturated		boiling	0	0
Aniline	C ₆ H ₅ NH ₂			20°C	0	0
Aniline hydrochloride	C ₆ H ₅ NH ₂ HCl 5%			20°C	3L	3L
Antichlor	see sodium thiosulphate, sodium perborate					
Antimony	Sb	molten		650°C	3	3
Antimony chloride	SbCl ₃			20°C	3L	3L
Aqua regia	HCl + HNO ₃			20°C	3	3
Aqueous ammonia	see ammonium hydroxide					
Arsenic acid	H ₃ AsO ₄ · 1/2H ₂ O		all concentrations	20°C	0	0
Aspirin	see acetosalicylic acid					
Atmosphere 1)					0	0
Barium chloride	BaCl ₂	fused		fused	3	3
Barium chloride	BaCl ₂ · 2H ₂ O	saturated solution		20°C	0L	0L
Barium chloride	BaCl ₂ · 2H ₂ O	saturated solution		boiling	1L	0L
Barium hydroxide	Ba(OH) ₂	cold saturated		20°C	0	0
Barium hydroxide	Ba(OH) ₂	cold and hot saturated		boiling	0	0
Barium nitrate	Ba(NO ₃) ₂		all concentrations	boiling	0	0
Beer 2)				20°C and 70°C	0	0
Benzoic acid	C ₆ H ₅ COOH		all concentrations	20°C and boiling	0	0
Benzole	C ₆ H ₆			20°C and boiling	0	0
Bleach liquor	see sodium hypochlorite					
Bleach solution	see chlorinated lime					
Bleaching lye	see sodium hypochlorite					
Blood 3)					0L	0
Bonder's solution	see iron phosphate					

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Borax	see sodium tetraborate					
Boric acid	H ₃ BO ₃		all concentrations	20°C	0	0
Boric acid	H ₃ BO ₃		all concentrations	boiling	0	0
Brandy 1)				20°C and boiling	0	0
Bromine	Br ₂			20°C and boiling	3L	3L
Bromine water			0.03%	20°C	0L	0L
Bromine water			0.3%	20°C	1L	1L
Bromine water			1%	20°C	3L	3L
Buttermilk				20°C	0	0
Butyric acid	C ₃ H ₇ COOH		100%	20°C	0	0
Butyric acid	C ₃ H ₇ COOH		100%	boiling	1	0
Cadmium	Cd			molten	2	2
Calcium bisulphite 2) (sulphite lye)	CaH ₂ (SO ₃) ₂	cold saturated		20°C	0	0
Calcium bisulphite (sulphite lye)	CaH ₂ (SO ₃) ₂	cold and hot saturated		boiling	2	0
Calcium bisulphite (sulphite lye)	CaH ₂ (SO ₃) ₂	20 bar		200°C	3	0
Calcium chloride	CaCl ₂ · 6H ₂ O	cold saturated		20°C	0L	0L
Calcium chloride	CaCl ₂ · 6H ₂ O	cold saturated		boiling	1L	1L
Calcium hydroxide (slaked lime)	Ca(OH) ₂			20°C	0	0
Calcium hydroxide (slaked lime)	Ca(OH) ₂			boiling	0	0
Calcium hypochlorite	Ca(OCl) ₂ · 4H ₂ O	cold saturated		up to 40°C	2L	1L
Calcium sulphate	CaSO ₄	saturated		20°C	0	0
Calcium sulphite	CaSO ₃	cold saturated		20°C	0	0
Camphor	C ₁₀ H ₁₆ O			20°C	0	0
Carbolic acid	see phenol					
Carbon dioxide (carbonic acid)	CO ₂	dry		hot	0	0
Carbon dioxide (carbonic acid)	CO ₂	moist		hot	0	0
Carbon disulphide	CS ₂			20°C	0	0
Carbon tetrachloride 3)	CCl ₄	anhydrous		20°C	0	0
Carbon tetrachloride 3)	CCl ₄ anhydrous			boiling	0	0
Carnallite	KClMgCl ₂ · 6H ₂ O	cold saturated		20°C		
Carnallite	KClMgCl ₂ · 6H ₂ O	cold and hot saturated		boiling	1L	1L
Caustic potash solution	see potassium hydroxide					
Caustic soda solution	see sodium hydroxide					
Cheese				20°C	0	0
Chloramine-T	see p-toluene sodium sulfonylchloramide					
Chloric acid	HClO ₃		concentrated	20°C	3L	3L
Chlorinated lime	[3CaCl(OCl) · Ca(OH) ₂] · 5H ₂ O	dry		20°C	0	0
Chlorinated lime	[3CaCl(OCl) · Ca(OH) ₂] · 5H ₂ O	moist		20°C	1L	1L
Chlorinated lime (bleach solution)	[3CaCl(OCl) · Ca(OH) ₂] · 5H ₂ O		2.5g Cl/l	20°C	1L	0L

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Chlorine (damp gas)	Cl ₂			20°C	3L	3L
Chlorine (damp gas)	Cl ₂			100°C	3L	3L
Chlorine (dry gas)	Cl ₂			20°C	0	0
Chlorine water	cold water saturated with chlorine			20°C	1L	1L
Chloroacetic acid	see mono-and trichloroacetic acid					
Chlorobenzene 1)	C ₆ H ₅ Cl	dry		20°C	0	0
Chlorobenzene 1)	C ₆ H ₅ Cl	dry		boiling	0	0
Chloroform 1)	CHCl ₃	anhydrous		20 °C and boiling	0	0
Chlorosulphonic acid	HSO ₃ Cl		10%	20°C	3L	3L
Chlorosulphonic acid	HSO ₃ Cl		100%	20°C	0L	0L
Chocolate				20°C	0	0
Chrome alum	see potassium chrome sulphate					
Chrome sulphate	Cr ₂ (SO ₄) ₃ · 18H ₂ O saturated			20°C	0	0
Chromic acid	CrO ₃		10 % pure, free of SO ₃	20°C	0	0
Chromic acid	CrO ₃		10 % pure, free of SO ₃	boiling	1	1
Chromic acid	CrO ₃		50 % pure, free of SO ₃	20°C	1	1
Chromic acid	CrO ₃		50 % pure, free of SO ₃	boiling	2	2
Chromic acid	CrO ₃		50 % tech., containing SO ₃	20°C	1	1
Chromic acid	CrO ₃		50 % tech., containing SO ₃	boiling	3	3
Cider				20°C	0	0
Citric acid	HOC(CH ₂ COOH) ₂ COOH · H ₂ O		1%	20°C	0	0
Citric acid	HOC(CH ₂ COOH) ₂ COOH · H ₂ O		1%	boiling	0	0
Citric acid	HOC(CH ₂ COOH) ₂ COOH · H ₂ O		10%	20°C	0	0
Citric acid	HOC(CH ₂ COOH) ₂ COOH · H ₂ O		10%	boiling	0	0
Citric acid	HOC(CH ₂ COOH) ₂ COOH · H ₂ O		25%	20°C	0	0
Citric acid	HOC(CH ₂ COOH) ₂ COOH · H ₂ O		25%	boiling	2	0
Citric acid	HOC(CH ₂ COOH) ₂ COOH · H ₂ O		50%	20°C	0	0
Citric acid	HOC(CH ₂ COOH) ₂ COOH · H ₂ O		50%	boiling	2	1
Citric acid	HOC(CH ₂ COOH) ₂ COOH · H ₂ O 3 bar		5%	140°C	1	0
Coffee				20 °C and boiling	0	0
Copper acetate	(CH ₃ COO) ₂ Cu · H ₂ O	cold saturated		20°C	0	0
Copper acetate	(CH ₃ COO) ₂ Cu · H ₂ O	cold and hot saturated		boiling	0	0
Copper carbonate	CuCO ₃ Cu(OH) ₂		all concentrations	20°C	0	0
Copper chloride	CuCl ₂ · 2H ₂ O		cold saturated	20°C	3L	3L
Copper cyanide	Cu(CN) ₂		hot saturated	boiling	0	0
Copper nitrate	Cu(NO ₃) ₂ · 3H ₂ O		50%	20°C	0	0
Copper nitrate	Cu(NO ₃) ₂ · 3H ₂ O		50%	boiling	0	0
Copper sulphate	CuSO ₄ · 5H ₂ O		all concentrations	20°C and boiling	0	0
Copper sulphate (blue vitriol + 3% H ₂ SO ₄)	CuSO ₄ · 5H ₂ O			20°C	0	0

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Copper sulphate (blue vitriol + 3% H ₂ SO ₄)	CuSO ₄ · 5H ₂ O			boiling	0	0
Creosote				20°C	0	0
Creosote				boiling	0	0
Cresol	CH ₃ C ₆ H ₄ (OH)			20°C	0	0
Crude oil				20°C	0	0
Developer	see photographic developer					
Dichloroethane 1)	CH ₂ ClCH ₂ Cl	anhydrous		20°C	0	0
Dichloroethylene 1)	CHClCHCl	anhydrous		boiling	0	0
Disulphur dichloride 1)	S ₂ Cl ₂	anhydrous		20°C	0	0
Disulphur dichloride 1)	S ₂ Cl ₂	anhydrous		boiling	0	0
Dripping				20°C	0	0
Dye bath (alkaline or neutral)				20°C and boiling	0	0
Dye bath (organic acid)				20°C	0	0
Dye bath (organic acid)				boiling	0	0
Dye bath (strong sulphuric acid or organic + strong sulphuric acid) (H ₂ SO ₄ more than 1%)				20°C	1	0
Dye bath (strong sulphuric acid or organic + strong sulphuric acid) (H ₂ SO ₄ more than 1%)				boiling	1	1
Dye bath (weak sulphuric acid or organic + sulphuric acid) (H ₂ SO ₄ less than 1%)				20°C	0	0
Dye bath (weak sulphuric acid or organic + sulphuric acid) (H ₂ SO ₄ less than 1%)				boiling	1	0
Epsom salts	see magnesium sulphate					
Ethyl chloride 1)	C ₂ H ₅ Cl	anhydrous		boiling	0	0
Ethyl ether	(C ₂ H ₅) ₂ O			boiling	0	0
Ethyl glycol	CH ₂ OHCH ₂ OH			20°C	0	0
Ethylalcohol (spirit)	C ₂ H ₅ OH		all concentrations	20°C and boiling	0	0
Ethylene chloride	see dichloroethane					
Fatty acid (oleic acid) + traces of H ₂ SO ₄	C ₁₇ H ₃₃ COOH			hot	2	1
Fatty acid (oleic acid)	C ₁₇ H ₃₃ COOH 30 bar technical			150°C	0	0
Fatty acid (oleic acid)	C ₁₇ H ₃₃ COOH 30 bar technical			180°C	1	0
Fatty acid (oleic acid)	C ₁₇ H ₃₃ COOH 30 bar technical			235°C	1	0
Fatty acid (oleic acid)	C ₁₇ H ₃₃ COOH 30 bar technical			300°C	2	0
Ferric chloride	FeCl ₃ 30%			20°C	3L	2L
Ferric chloride	FeCl ₃ 50%			50°C	3L	3L
Ferric nitrate	Fe(NO ₃) ₃ · 9H ₂ O		all concentrations	20°C	0	0
Ferric sulphate 2)	Fe ₂ (SO ₄) ₃		10%	20°C	0	0
Ferric sulphate 2)	Fe ₂ (SO ₄) ₃		10%	boiling	0	0
Ferrous sulphate	FeSO ₄ · 7H ₂ O		all concentrations	20°C	0	0
Fixing salt	see photographic fixing bath					

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Fluosilicic acid	H ₂ SiF ₆	vapours		100°C	1	1
Formaldehyde (formalin = methyl aldehyde)	HCHO		40%	20°C and boiling	0	0
Formic acid	HCOOH		10%	20°C	0	0
Formic acid	HCOOH		10%	70°C	1	0
Formic acid	HCOOH		10%	boiling	2	1
Formic acid	HCOOH		50%	20°C	0	0
Formic acid	HCOOH		50%	70°C	2	1
Formic acid	HCOOH		50%	boiling	3	1
Formic acid	HCOOH		80%	20°C	0	0
Formic acid	HCOOH		80%	boiling	2	1
Formic acid	HCOOH		100%	20°C	0	0
Formic acid	HCOOH		100%	boiling	2	1
Fruit juices and fruit acids				20°C and boiling	0	0
Fruit pulp (containing SO ₂)					0	0
Gallic acid	C ₆ H ₂ (OH) ₃ COOH	saturated		20°C	0	0
Gallic acid	C ₆ H ₂ (OH) ₃ COOH	hot saturated		boiling	0	0
Glacial acetic acid			100%	20°C	0	0
Glacial acetic acid			100%	boiling	1	1
Glauber's salt	see sodium sulphate					
Glue (also acid)				boiling	0	0
Glycerine	C ₃ H ₅ (OH) ₃	concentrated		20°C and boiling	0	0
Hydrazine sulphate (NH ₂) ₂ · H ₂ SO ₄ 10 %				boiling	0	0
Hydrochloric acid	gas, see hydrogen chloride gas					
Hydrochloric acid	HCl 0.50%			20°C	1L	1L
Hydrochloric acid	HCl 0.50%			boiling	3L	3L
Hydrocyanic acid	HCN			20°C	0	0
Hydrofluoric acid	HF		40%	20°C	3	3
Hydrogen chloride gas	HCl			20°C	1L	1L
Hydrogen chloride gas	HCl			50°C	1L	1L
Hydrogen chloride gas	HCl			100°C	2L	2L
Hydrogen chloride gas	HCl			400°C	3	3
Hydrogen fluoride	HF	dry gaseous		100°C	1	1
Hydrogen peroxide 2)	H ₂ O ₂			20°C	0	0
Hydrogen sulphide	H ₂ S	dry	< 4%	20°C	0	0
Hydrogen sulphide	H ₂ S		< 4%	100°C	0	0
Hydrogen sulphide	H ₂ S		< 4%	< 400°C	0	0
Hydrogen sulphide	H ₂ S	moist	< 4%		0	0
Hydroxylamine sulphate	(NH ₂ OH) ₂ · H ₂ SO ₄		10%	20°C and boiling	0	0
Industrial air	see atmosphere					

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Ink	see iron gallate ink					
Iodine	J ₂	dry		20°C	0	0
Iodine	J ₂	moist		20°C	1L	1L
Iodoform ³⁾	CHI ₃	vapour		20°C and 60°C	0	0
Iron gallate ink ⁴⁾				20°C	0L	0
Iron phosphate ⁵⁾				98°C	0	0
Lactic acid	CH ₃ CH(OH)COOH		2%	20°C	0	0
Lactic acid	CH ₃ CH(OH)COOH		2%	boiling	0	0
Lactic acid	CH ₃ CH(OH)COOH		10%	20°C	0	0
Lactic acid	CH ₃ CH(OH)COOH		10%	boiling	1	0
Lactic acid	CH ₃ CH(OH)COOH		80%	20°C	0	0
Lactic acid	CH ₃ CH(OH)COOH		80%	boiling	2	1
Lactic acid	CH ₃ CH(OH)COOH		concentrated	20°C	0	0
Lactic acid	CH ₃ CH(OH)COOH		concentrated	boiling	2	1
Lead ¹⁾	Pb	molten		600°C	1	
Lead acetate (sugar of lead)	Pb(CH ₃ COO) ₂ · 3H ₂ O		all concentrations	20°C	0	0
Lead acetate (sugar of lead)	Pb(CH ₃ COO) ₂ · 3H ₂ O		all concentrations	boiling	0	0
Lead nitrate	Pb(NO ₃) ₂			20°C	0	0
Lemon juice				20°C	0	0
Linseed oil (+3% H ₂ SO ₄)				20°C	0	0
Linseed oil (+3% H ₂ SO ₄)				200°C	0	0
Liqueurs					0	0
Lubricating oils	see oil					
Lysoform				boiling	0	0
Lysol				boiling	0	0
Magnesium carbonate	MgCO ₃		all concentrations	20°C	0	0
Magnesium chloride	MgCl ₂ · 6H ₂ O		10%	20°C	0L	0L
Magnesium chloride	MgCl ₂ · 6H ₂ O		30%	20°C	0L	0L
Magnesium sulphate (Epsom salts)	MgSO ₄ · 7H ₂ O	cold saturated		20°C	0	0
Magnesium sulphate (Epsom salts)	MgSO ₄ · 7H ₂ O	cold and hot saturated		boiling	0	0
Maleic acid	(CHCOOH) ₂		50%	100°C	0	0
Malic acid	COOHCH ₂ CHOHCOOH		up to 50%	20°C	0	0
Malic acid	COOHCH ₂ CHOHCOOH		up to 50%	60°C	0	0
Malic acid	COOHCH ₂ CHOHCOOH		up to 50%	100°C	1	0
Manganese chloride	MnCl ₂ · 4H ₂ O		10%	boiling	0L	0L
Manganese chloride	MnCl ₂ · 4H ₂ O		50%	boiling	0	0L
Manganese sulphate	MnSO ₄ · 7H ₂ O			20°C	0	0
Meat					0	0
Mercuric acetate	Hg(CH ₃ COO) ₂	cold saturated		20°C	0	0

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Mercuric acetate	Hg(CH ₃ COO) ₂	hot saturated		boiling	0	0
Mercuric chloride	HgCl ₂ (sublimate)		0.10%	20°C	0L	0L
Mercuric chloride	HgCl ₂ (sublimate)		0.10%	boiling	1L	0L
Mercuric chloride	HgCl ₂ (sublimate)		0.70%	20°C	1L	1L
Mercuric chloride	HgCl ₂ (sublimate)		0.70%	boiling	2L	2L
Mercurous nitrate	(HgNO ₃) ₂ · 2H ₂ O		all concentrations	boiling	0	0
Mercury	Hg			20°C and 50 °C	0	0
Mercury cyanide	Hg(CN) ₂		all concentrations	20°C	0	0
Methyl alcohol	CH ₃ OH		all concentrations	20°C and 65 °C	0	0
Methyl aldehyde	see formaldehyde					
Methyl chloride 2)	CH ₃ Cl	anhydrous		boiling	0	0
Methylene chloride 2)	CH ₂ Cl ₂	anhydrous		boiling	0	0
Milk		fresh		up to 70°C	0	0
Milk		sour		up to 70°C	0	0
Milk of lime	see calcium hydroxide					
Mixed acids (nitrating acids)			50% H ₂ SO ₄ + 50% HNO ₃	50°C	0	0
Mixed acids (nitrating acids)			50% H ₂ SO ₄ + 50% HNO ₃	90°C	1	1
Mixed acids (nitrating acids)			50% H ₂ SO ₄ + 50% HNO ₃	120°C	2	2
Mixed acids (nitrating acids)			75% H ₂ SO ₄ + 25% HNO ₃	50°C	1	0
Mixed acids (nitrating acids)			75% H ₂ SO ₄ + 25% HNO ₃	90°C	1	1
Mixed acids (nitrating acids)			75% H ₂ SO ₄ + 25% HNO ₃	157°C	3	3
Mixed acids (nitrating acids)			20% H ₂ SO ₄ + 15% HNO ₃	50°C	0	0
Mixed acids (nitrating acids)			20% H ₂ SO ₄ + 15% HNO ₃	80°C	1	0
Mixed acids (nitrating acids)			70% H ₂ SO ₄ + 10% HNO ₃	50°C	0	0
Mixed acids (nitrating acids)			70% H ₂ SO ₄ + 10% HNO ₃	90°C	1	0
Mixed acids (nitrating acids)			70% H ₂ SO ₄ + 10% HNO ₃	168°C	3	3
Mixed acids (nitrating acids)			30% H ₂ SO ₄ + 5% HNO ₃	90°C	0	0
Mixed acids (nitrating acids)			30% H ₂ SO ₄ + 5% HNO ₃	110°C	1	0
Mixed acids (nitrating acids)			15% H ₂ SO ₄ + 5% HNO ₃	134°C	1	1
Mixed acids (nitrating acids)			2% H ₂ SO ₄ + 1% HNO ₃	boiling	2	0
Monochloroacetic acid	CH ₂ ClCOOH 50%			20°C	1L	1L
Mustard				20°C	0L	0L
Nickel chloride	NiCl ₂ · 6H ₂ O	cold saturated		20°C	1L	1L
Nickel nitrate	Ni(NO ₃) ₂ · 6H ₂ O	cold saturated		20°C	0	0
Nickel sulphate	NiSO ₄ · 7H ₂ O	cold saturated		20°C and boiling	0	0
Nitrating acid	see mixed acids					
Nitric acid	HNO ₃		7%	20°C	0	0
Nitric acid	HNO ₃		7%	boiling	0	0
Nitric acid	HNO ₃		10%	20°C	0	0

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Nitric acid	HNO ₃		10%	boiling	0	0
Nitric acid	HNO ₃		25%	20°C	0	0
Nitric acid	HNO ₃		25%	boiling	0	0
Nitric acid	HNO ₃		37%	20°C	0	0
Nitric acid	HNO ₃		37%	boiling	0	0
Nitric acid	HNO ₃		50%	20°C	0	0
Nitric acid	HNO ₃		50%	boiling	1	1
Nitric acid	HNO ₃		66%	20°C	0	0
Nitric acid	HNO ₃		66%	boiling	1	1
Nitric acid	HNO ₃		99% (high concentration)	20°C	1	2
Nitric acid	HNO ₃		99% (high concentration)	boiling	2	2
Nitrosylsulphuric acid 60° Bé with 4 –5% nitro content				20°C	0	0
Nitrosylsulphuric acid 60° Bé with 4 –5% nitro content				75°C		1
Nitrous acid	HNO ₂		concentrated	20°C	0	0
Novocain				20°C	0	0
Oil (lubricating oil)				20°C and boiling	0	0
Oil (vegetable oil)				20°C and boiling	0	0
Oleic acid	see fatty acids					
Oxalic acid	(COOH) ₂ · 2H ₂ O		5%	20°C	0	0
Oxalic acid	(COOH) ₂ · 2H ₂ O		5%	boiling	1	1
Oxalic acid	(COOH) ₂ · 2H ₂ O		10%	20°C	1	0
Oxalic acid	(COOH) ₂ · 2H ₂ O		10%	boiling	2	2
Oxalic acid	(COOH) ₂ · 2H ₂ O		25%	boiling	2	2
Oxalic acid	(COOH) ₂ · 2H ₂ O		50%	boiling	2	2
P-toluene sulfonchloramide sodium (chloramin T)	CH ₃ C ₆ H ₄ SO ₂ NCINa · 3H ₂ O	cold saturated		20°C	1L	0L
P-toluene sulfonchloramide sodium(chloramin T)	CH ₃ C ₆ H ₄ SO ₂ NCINa · 3H ₂ O	cold and hot concentrated		boiling	1L	0L
Paraffin				20°C and molten	0	0
Persil				20°C and boiling	0	0
Petrol			all concentrations	20°C	0	0
Petroleum				20°C and boiling	0	0
Petroleum ether					0	0
Phenol (carbolic acid)	C ₆ H ₅ OH		pure	boiling	1	0
Phenol (carbolic acid)	C ₆ H ₅ OH		with 10% H ₂ O	boiling	1	0
Phenol (carbolic acid)	C ₆ H ₅ OH		raw 90% phenol	boiling	1	0
Phosphate detergents				95°C	0	0
Phosphoric acid	H ₃ PO ₄ chem. pure		1%	20°C	0	0
Phosphoric acid	H ₃ PO ₄ chem. pure		1%	boiling	0	0
Phosphoric acid	H ₃ PO ₄ chem. pure		10%	20°C	0	0

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Phosphoric acid	H ₃ PO ₄ chem. pure		10%	boiling	0	0
Phosphoric acid	H ₃ PO ₄ chem. pure		45%	20°C	0	0
Phosphoric acid	H ₃ PO ₄ chem. pure		45%	boiling	2	1
Phosphoric acid	H ₃ PO ₄ chem. pure		60%	20°C	0	0
Phosphoric acid	H ₃ PO ₄ chem. pure		60%	boiling	2	1
Phosphoric acid	H ₃ PO ₄ chem. pure		70%	20°C	0	0
Phosphoric acid	H ₃ PO ₄ chem. pure		70%	boiling	2	2
Phosphoric acid	H ₃ PO ₄ chem. pure		80%	20°C	1	0
Phosphoric acid	H ₃ PO ₄ chem. pure		80%	boiling	3	2
Phosphoric acid	H ₃ PO ₄ chem. pure		concentrated	20°C	1	0
Phosphoric acid	H ₃ PO ₄ chem. pure		concentrated	boiling	3	3
Phosphoric acid anhydride (phosphorus pentoxide, dry or moist)	P ₂ O ₅			20°C	1	0
Photographic developer (Agfa-glycine developer)				20°C	0	0
Photographic fixing bath (1)				20°C	0L	0L
Pickling liquid				20°C	0L	0L
Picric acid	C ₆ H ₂ (NO ₂) ₃ OH		all concentrations	20°C	0	0
Pink salt	see ammonium hexachlorostannate					
Potash	see potassium carbonate					
Potassium acetate	CH ₃ COOK	molten			0	0
Potassium aluminium sulphate (alum)	KAl(SO ₄) ₂ · 12H ₂ O		10%	20°C	0	0
Potassium aluminium sulphate (alum)	KAl(SO ₄) ₂ · 12H ₂ O		10%	boiling	1	0
Potassium aluminium sulphate (alum)	KAl(SO ₄) ₂ · 12H ₂ O	cold saturated		20°C	0	0
Potassium aluminium sulphate (alum)	KAl(SO ₄) ₂ · 12H ₂ O	cold and hot saturated		boiling	1	0
Potassium bifluoride	KHF ₂	cold saturated		20°C	0	0
Potassium bisulphate	KHSO ₄		2%	90°C	3	2
Potassium bisulphate	KHSO ₄		5%	20°C	1	0
Potassium bisulphate	KHSO ₄		5%	90°C	3	2
Potassium bisulphate	KHSO ₄		15%	90°C	3	2
Potassium bitartrate (tartar)	KHC ₄ H ₄ O ₆	cold saturated		cold	0	0
Potassium bitartrate (tartar)	KHC ₄ H ₄ O ₆	cold and hot saturated		boiling	2	1
Potassium bromide	KBr			20°C	0L	0L
Potassium carbonate (potash)	K ₂ CO ₃	cold saturated		20°C	0	0
Potassium carbonate (potash)	K ₂ CO ₃	cold and hot saturated		boiling	0	0
Potassium chlorate	KClO ₃	hot saturated		boiling	0	0
Potassium chloride	KCl			20°C	0L	0L
Potassium chloride	KCl	cold and hot saturated		boiling	0L	0L
Potassium chrome sulphate (chrome alum)	KCr(SO ₄) ₂ · 12H ₂ O	cold saturated		20°C	0	0
Potassium chrome sulphate (chrome alum)	KCr(SO ₄) ₂ · 12H ₂ O	cold and hot saturated		boiling	3	3

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Potassium cyanate	KOCN			20°C	0	0
Potassium cyanide	KCN		5%	20°C	0	0
Potassium dichromate	K ₂ Cr ₂ O ₇		25%	20°C	0	0
Potassium dichromate	K ₂ Cr ₂ O ₇		25%	boiling	0	0
Potassium ferricyanide	K ₃ [Fe(CN) ₆]	cold saturated		20°C	0	0
Potassium ferricyanide	K ₃ [Fe(CN) ₆]	hot saturated		boiling	0	0
Potassium ferrocyanide	K ₄ [Fe(CN) ₆] · 3H ₂ O	cold and hot saturated		20°C and boiling	0	0
Potassium hydroxide (caustic potash solution)	KOH		20%	20°C	0	0
Potassium hydroxide (caustic potash solution)	KOH		20%	boiling	0	0
Potassium hydroxide (caustic potash solution)	KOH		50%	20°C	0	0
Potassium hydroxide (caustic potash solution)	KOH		50%	boiling	0	0
Potassium hydroxide (caustic potash solution)	KOH	hot saturated		boiling	0	0
Potassium hydroxide (caustic potash)	KOH	fused		360°C	3	3
Potassium hypochlorite	KClO		approx. 15% free chlorine	20°C	2L	1L
Potassium hypochlorite	KClO			150°C	2L	1L
Potassium iodide	KI	cold saturated		20°C	0	0L
Potassium nitrate (saltpetre)	KNO ₃		25%	20°C	0	0
Potassium nitrate (saltpetre)	KNO ₃		25%	boiling	0	0
Potassium nitrate (saltpetre)	KNO ₃		50%	20°C	0	0
Potassium nitrate (saltpetre)	KNO ₃		50%	boiling	0	0
Potassium nitrate (saltpetre)	KNO ₃	molten		550°C	0	0
Potassium oxalate	K ₂ C ₂ O ₄ · H ₂ O		all concentrations	20°C	0	0
Potassium oxalate	K ₂ C ₂ O ₄ · H ₂ O		all concentrations	boiling	0	0
Potassium permanganate	KMnO ₄		all concentrations	20°C	0	0
Potassium permanganate	KMnO ₄		all concentrations	boiling	1	0
Potassium sulphate	K ₂ SO ₄	cold and hot saturated		20°C and boiling	0	0
Precipitation bath	see spinning bath					
Prussic acid	see hydrocyanic acid					
Pulp	see fruit pulp					
Pyrogallic acid (pyrogallol)	C ₆ H ₃ (OH) ₃		all concentrations	20°C	0	0
Quinine sulphate				20°C	0	0
Sal ammoniac	see ammonium chloride					
Salicylic acid	HOC ₆ H ₄ COOH		all concentrations	20°C	0	0
Salt of hartshorn	NH ₄ HCO ₃ + (NH ₄) ₂ CO ₃	cold saturated		20°C and boiling	0	0
Salt/acid mixtures	10% H ₂ SO ₄ + 10% copper sulphate			boiling	0	0
Salt/acid mixtures	10% H ₂ SO ₄ + 2% ferrous sulphate			boiling	1	1
Saltpetre	see potassium nitrate/sodium nitrate					
Sauerkraut liquor				20°C	2L	1L
Schweinfurt green	Cu(CH ₃ COO) ₂ · 3Cu(AsO ₂) ₂			20°C	0	0

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Seawater (1)				20°C	0L	0L
Seawater (1)				boiling	2L	1L
Silver bromide	AgBr	saturated		20°C	0L	0L
Silver chloride	AgCl	saturated			1L	1L
Silver nitrate	AgNO ₃		10%	boiling	0	0
Silver nitrate	AgNO ₃	fused		250°C	0	0
Slaked lime	see calcium hydroxide					
Soap				20°C	0	0
Soda	see sodium carbonate					
Sodium acetate	CH ₃ COONa · 3H ₂ O	saturated		boiling	0	0
Sodium bicarbonate	NaHCO ₃		all concentrations	20°C	0	0
Sodium bisulphate	NaHSO ₄ · H ₂ O		10%	boiling	1	0
Sodium bisulphite	NaHSO ₃		50%	boiling	0	0
Sodium bromide	NaBr		20%	80°C		
Sodium carbonate (soda)	Na ₂ CO ₃ · 10H ₂ O		10%	boiling	0	0
Sodium carbonate (soda)	Na ₂ CO ₃ · 10H ₂ O	fused		100°C	0	0
Sodium carbonate (soda)	Na ₂ CO ₃ · 10H ₂ O	fused		900°C	3	3
Sodium chlorate	NaClO ₃		30%	20°C and boiling	0	0
Sodium chloride (table salt)	NaCl	cold saturated		20°C	0L	0L
Sodium chloride (table salt)	NaCl	hot saturated		100°C	1L	1L
Sodium chlorite	NaClO ₂		5%	20°C	2L	2L
Sodium chlorite	NaClO ₂		5%	boiling	3	2
Sodium fluoride	NaF		5%	20°C		0
Sodium hydrogen phosphate	Na ₂ HPO ₄ · 12H ₂ O			boiling	0	0
Sodium hydroxide(caustic soda solution)	NaOH		25%	20°C	0	0
Sodium hydroxide(caustic soda solution)	NaOH		25%	boiling	1	1
Sodium hydroxide(caustic soda solution)	NaOH		50%	boiling	1	1
Sodium hydroxide(caustic soda)	NaOH	fused		320°C	3	3
Sodium hypochlorite (bleaching liquor)	NaClO		5%	20°C	1L	1L
Sodium hypochlorite (bleaching liquor)	NaClO		5%	boiling	1L	1L
Sodium nitrate (Chile saltpetre)	NaNO ₃			20°C	0	0
Sodium nitrate (Chile saltpetre)	NaNO ₃			boiling	0	0
Sodium nitrate (Chile saltpetre)	NaNO ₃	fused		360°C	0	0
Sodium nitrite	NaNO ₂	hot saturated		boiling	0	0
Sodium perborate	NaBO ₃ · 4H ₂ O	cold saturated		20°C	0	0
Sodium perchlorate	NaClO ₄ · 4H ₂ O		10%	boiling	0	0
Sodium peroxide (sodium superoxide)	Na ₂ O ₂		10%	20°C	0	0
Sodium peroxide (sodium superoxide)	Na ₂ O ₂		10%	boiling	0	0
Sodium peroxide (sodium superoxide)	Na ₂ O ₂		10 % stabilised with sodium silicate	up to 80°C	0	0

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Sodium phosphate sec.	Na ₂ HPO ₄ · 12H ₂ O	cold saturated		20°C and boiling	0	0
Sodium phosphate tert.	Na ₃ PO ₄ · 12H ₂ O	cold saturated		20°C and boiling	0	0
Sodium salicylate	HOC ₆ H ₄ COONa	cold saturated		20°C	0	0
Sodium silicate	Na ₂ SiO ₃			20°C and boiling	0	0
Sodium sulphate (Glauber's salt)	Na ₂ SO ₄ · 10H ₂ O	cold saturated		20°C	0	0
Sodium sulphate (Glauber's salt)	Na ₂ SO ₄ · 10H ₂ O	cold saturated		boiling	0	0
Sodium sulphide	Na ₂ S · 9H ₂ O		25%	boiling	0	0
Sodium sulphide	Na ₂ S · 9H ₂ O		sat. solution	100°C	1	1
Sodium sulphite	Na ₂ SO ₃ · 7H ₂ O		50%	boiling	0	0
Sodium tetraborate (borax)	Na ₂ B ₄ O ₇ · 10H ₂ O	saturated		20°C	0	0
Sodium tetraborate (borax)	Na ₂ B ₄ O ₇ · 10H ₂ O	saturated		boiling	0	0
Sodium tetraborate (borax)	Na ₂ B ₄ O ₇ · 10H ₂ O	molten			3	3
Sodium thiosulphate (anti-chlorine)	Na ₂ S ₂ O ₃ · 5H ₂ O		25%	20°C	0	0
Sodium thiosulphate (anti-chlorine)	Na ₂ S ₂ O ₃ · 5H ₂ O		25%	boiling	0	0
Soft soap				20°C	0	0
Spinning bath (viscose bath)			up to 10 % H ₂ SO ₄	70°C	2	1
Spinning bath (viscose bath)			over 10 % H ₂ SO ₄	70°C	3	3
Spirit	see ethyl alcohol					
Stannic chloride	SnCl ₄			20°C	3L	2L
Stannic chloride	SnCl ₄			boiling	3L	2L
Stannous chloride	SnCl ₂ · 2H ₂ O	hot saturated		50°C	1L	0L
Stannous chloride	SnCl ₂ · 2H ₂ O	hot saturated		boiling	3L	3L
Steam				400°C	0	0
Stearic acid	C ₁₇ H ₃₅ COOH			20°C	0	0
Stearic acid	C ₁₇ H ₃₅ COOH			130°C	0	0
Sublimate	see mercuric chloride					
Sugar of lead	see lead acetate					
Sugar solution				20°C and boiling	0	0
Sulphite liquor	see calcium bisulphite					
Sulphur chloride	see disulphur dichloride					
Sulphur dioxide	see sulphurous acid (gas)					
Sulphur, dry		molten		130°C	0	0
Sulphur, dry		oiling		445°C	2	2
Sulphur, wet				20°C	1	0
Sulphuric acid 1)	H ₂ SO ₄		1%	20°C	1	0
Sulphuric acid 1)	H ₂ SO ₄		1%	70°C	1	0
Sulphuric acid 1)	H ₂ SO ₄		1%	boiling	1	1
Sulphuric acid 1)	H ₂ SO ₄		2.5%	20°C	1	0
Sulphuric acid 1)	H ₂ SO ₄		2.5%	70°C	1	0

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Sulphuric acid (1)	H ₂ SO ₄		2.5%	boiling	2	2
Sulphuric acid (1)	H ₂ SO ₄		5%	20°C	1	0
Sulphuric acid (1)	H ₂ SO ₄		5%	70°C	1	1
Sulphuric acid (1)	H ₂ SO ₄		5%	boiling	3	2
Sulphuric acid (1)	H ₂ SO ₄		7.5%	20°C	1	0
Sulphuric acid (1)	H ₂ SO ₄		7.5%	70°C	1	1
Sulphuric acid (1)	H ₂ SO ₄		7.5%	boiling	2	2
Sulphuric acid (1)	H ₂ SO ₄		10%	20°C	2	1
Sulphuric acid (1)	H ₂ SO ₄		10%	70°C	2	2
Sulphuric acid (1)	H ₂ SO ₄		10%	boiling	3	2
Sulphuric acid (1)	H ₂ SO ₄		20%	20°C	1	1
Sulphuric acid (1)	H ₂ SO ₄		20%	70°C	2	2
Sulphuric acid (1)	H ₂ SO ₄		20%	boiling	3	3
Sulphuric acid (1)	H ₂ SO ₄		40%	20°C	1	1
Sulphuric acid (1)	H ₂ SO ₄		40%	70°C	2	2
Sulphuric acid (1)	H ₂ SO ₄		40%	boiling	3	3
Sulphuric acid (1)	H ₂ SO ₄		60%	20°C	3	2
Sulphuric acid (1)	H ₂ SO ₄		60%	70°C	3	3
Sulphuric acid (1)	H ₂ SO ₄		60%	boiling	3	3
Sulphuric acid (1)	H ₂ SO ₄		80%	20°C	1	1
Sulphuric acid (1)	H ₂ SO ₄		80%	70°C	3	2
Sulphuric acid (1)	H ₂ SO ₄		80%	boiling	3	3
Sulphuric acid (1)	H ₂ SO ₄		98% (concentrated)	20°C	0	0
Sulphuric acid (1)	H ₂ SO ₄		98% (concentrated)	70°C	2	2
Sulphuric acid (1)	H ₂ SO ₄		98% (concentrated)	150°C	2	2
Sulphuric acid (1)	H ₂ SO ₄		98% (concentrated)	boiling	3	3
Sulphuric acid (1)		fuming (11 % free SO ₃)		20°C	0	0
Sulphuric acid (1)		fuming (11 % free SO ₃)		100°C	1	0
Sulphuric acid (1)		fuming (60 % free SO ₃)		20°C	0	0
Sulphuric acid (1)		fuming (60 % free SO ₃)		80°C	0	0
Sulphurous acid	H ₂ SO ₃	saturated		20°C	0	0
Sulphurous acid	H ₂ SO ₃	4 bar		135°C	1	0
Sulphurous acid	H ₂ SO ₃	5–8 bar		160°C	2	1
Sulphurous acid	H ₂ SO ₃	10–20 bar		180–200°C	2	1
Sulphurous acid, gas (SO ₂)	moist, free of SO ₃			up to 100°C	0	0
Sulphurous acid, gas (SO ₂)	moist, free of SO ₃			up to 300°C	1	0
Sulphurous acid, gas (SO ₂)	moist, free of SO ₃			up to 500°C	1	1
Sulphurous acid, gas (SO ₂)	moist, free of SO ₃			900°C	3	2
Super phosphate	Ca(H ₂ PO ₄) ₂ + CaSO ₄ + 3% H ₂ SO ₄			20°C	0	0

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Tannic acid (tannin)			5%	20°C	0	0
Tannic acid (tannin)			5%	boiling	0	0
Tannic acid (tannin)			10%	20°C	0	0
Tannic acid (tannin)			10%	boiling	0	0
Tannic acid (tannin)			50%	20°C	0	0
Tannic acid (tannin)			50%	boiling	0	0
Tannin	see tannic acid					
Tar, pure				20°C and hot	0	0
Tartar	see potassium bitartrate					
Tartaric acid	COOH(CHOH) ₂ COOH		10%	20°C	0	0
Tartaric acid	COOH(CHOH) ₂ COOH		10%	boiling	0	0
Tartaric acid	COOH(CHOH) ₂ COOH		50%	20°C	0	0
Tartaric acid	COOH(CHOH) ₂ COOH		50%	boiling	2	1
Thioglycolic acid	HSCH ₂ COOH			20°C		1
Thioglycolic acid	HSCH ₂ COOH			boiling		1
Tin	Sn	molten		200°C	0	0
Tin	Sn	molten		400°C	1	1
Tin	Sn	molten		600°C	3	3
Tincture of iodine				20°C	1L	1L
Toluene	C ₆ H ₅ CH ₃			20°C and boiling	0	0
Trichloroacetic acid	CCl ₃ COOH		80%	20°C	2L	1L
Trichloroethylene ²⁾	C ₂ HCl ₃	anhydrous		boiling	0	0
Trisodium phosphate	see sodium phosphate tert.					
Turpentine				20°C and hot	0	0
Urea	CO(NH ₂) ₂			20°C	0	0
Urine				20°C	0L	0L
Varnish (copal varnish)					0	0
Vaseline				20°C	0	0
Vaseline				hot	0	0
Vegetables				boiling	0	0
Vinegar (wine vinegar)				20°C	0	0
Vinegar (wine vinegar)				boiling	0	0
Washing powder					0	
Water ¹⁾ (tap water)				20°C	0	0
Water ²⁾ [pit water (acid water)]				20°C	0L	0L
Water glass				20°C	0	0
Water glass				boiling	0	0
Wine ³⁾ (white and red wines)				20°C	0	0
Wine ³⁾ (white and red wines)				hot	0	0

Chemical Resistance of Bochem LabSteel

Corrosive agent	Formula	Condition	Concentration	Temperature	Gr. 4	Gr. 5
Wine vinegar	see vinegar					
Xylene	$C_6H_4(CH_3)_2$			20°C and boiling	0	0
Zinc	Zn	molten		500°C	3	3
Zinc chloride	$ZnCl_2$	cold and hot saturated		20°C	0L	0L
Zinc chloride	$ZnCl_2$	cold saturated		45°C	2L	1L
Zinc chloride	$ZnCl_2$	cold and hot saturated		boiling	3L	2L
Zinc sulphate	$ZnSO_4 \cdot 7H_2O$	cold saturated		20°C	0	0
Zinc sulphate	$ZnSO_4 \cdot 7H_2O$	cold saturated		boiling	0	0
Zinc sulphate	$ZnSO_4 \cdot 7H_2O$	hot saturated		boiling	0	0
Zink cyanide	$Zn(CN)_2$ moistened with water			20°C	0	0