



## DATA SHEETS

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## PLATE MATERIALS - CORROSION TABLES

- 0 Corrosion rate less than 0,1 mm/year.  
The material is corrosion proof.
- 1 Corrosion rate less than 0,1 - 1 mm/year.  
The material is not corrosion proof, but can be used in certain cases.
- 2 Corrosion rate over 1 mm/year. Serious corrosion. The material is not usable.
- P,p Risk of pitting and crevice corrosion
- S,s Risk of stress corrosion cracking
- BP Boiling solution

| Corrosive medium     | Conc. | Temp. | 304 | 316 | 254 | TI | TI |
|----------------------|-------|-------|-----|-----|-----|----|----|
|                      |       |       |     |     | SMO |    | PD |
| Acetic acid          | 1     | 90    | 0   | 0   | 0   | 0  | 0  |
|                      | 5     | 20    | 0   | 0   | 0   | 0  | 0  |
|                      | 10    | 20    | 0   | 0   | 0   | 0  | 0  |
|                      | 20    | 20    | 0   | 0   | 0   | 0  | 0  |
|                      | 20    | 100   | 2   | 0   | 0   | 0  | 0  |
|                      | 50    | 20    | 0   | 0   | 0   | 0  | 0  |
|                      | 80    | 20    | 0   | 0   | 0   | 0  | 0  |
|                      | 80    | 85    | 1   | 0   | 0   | 0  | 0  |
|                      | 100   | 20    | 0   | 0   | 0   | 0  | 0  |
|                      | 100   | 100   | 1   | 0   | 0   | 0  | 0  |
| Acetone              | 100   | 20    | 0   | 0   | 0   | 0  | 0  |
| Ammonium chloride    | 1     | 20    | p0  | p0  | p0  | 0  | 0  |
|                      | 5     | BP    | p0s | p0s | p0s | 0  | 0  |
|                      | 10    | 20-50 | p0  | p0  | p0  | 0  | 0  |
|                      | 20    | 20-50 | p0  | p0  | p0  | 0  | 0  |
|                      | 50    | 115   | p2s | p1s | p1s | 0  | 0  |
| Beer                 |       | 20-70 | 0   | 0   | 0   | 0  | 0  |
| Benzene              |       | 20-BP | 0   | 0   | 0   | 0  | 0  |
| Butyl alcohol        |       | 20-BP | 0   | 0   | 0   | 0  | 0  |
| Calcium chloride     | 5     | 20    | p0  | p0  | p0  | 0  | 0  |
|                      | 5     | 50    | p0  | p0  | p0  | 0  | 0  |
|                      | 10    | 100   | p0s | p0s | p0s | 0  | 0  |
|                      | 10    | 20    | p0  | p0  | p0  | 0  | 0  |
|                      | 20    | 100   | p0s | p0s | p0s | 0  | 0  |
|                      | 25    | 100   | p0s | p0s | p0s | 0  | 0  |
|                      | 40    | 100   | p0s | p0s | p0s | 0  | 0  |
| Calcium hydroxide    | all   | 20-BP | 0   | 0   | 0   | 0  | 0  |
| Carbon tetrachloride | 100   | 20    | 0   | 0   | 0   | 0  | 0  |
|                      | 100   | 76    | 0   | 0   | 0   | 0  | 0  |
| Chromic acid         | 2     | 75    | 0   | 0   | 0   | 0  | 0  |
|                      | 10    | 40    | 0   | 0   | 0   | 0  | 0  |
|                      | 10    | BP    | 2   | 2   | 2   | 0  | 0  |

|                     |           |        |     |     |     |   |   |
|---------------------|-----------|--------|-----|-----|-----|---|---|
|                     | 20        | 200    | 0   | 0   | 0   | 0 | 0 |
|                     | 20        | 50     | 1   | 1   | 1   | 0 | 0 |
|                     | 40        | 20     | 1   | 1   |     | 0 | 0 |
|                     | 40        | 40     | 2   | 2   | 2   | 0 | 0 |
|                     | 50        | 20     | 2   | 2   | 2   | 0 | 0 |
| Detergents          | 1         | 80     | 0   | 0   | 0   | 0 | 0 |
| Dextrose            |           | 20     | 0   | 0   | 0   | 0 | 0 |
| Ether               |           | 20-BP  | 0   | 0   | 0   | 0 | 0 |
| Ethyl alcohol       | all conc. | 20-BP  | 0   | 0   | 0   | 0 | 0 |
| Fatty acids         | 100       | 20     | 0   | 0   | 0   | 0 | 0 |
|                     | 100       | 80-130 | 0   | 0   | 0   | 0 | 0 |
|                     | 100       | 150    | 0   | 0   | 0   | 0 | 0 |
|                     | 100       | 180    | 1   | 0   | 0   | 0 | 0 |
|                     | 100       | 235    | 1   | 0   | 0   | 0 | 0 |
|                     | 100       | 300    | 2   | 0   | 0   | 0 | 0 |
| Fluorine            | dry gas   | 20     | 0   | 0   | 0   | 0 | 0 |
|                     | most      | 20     | 2   | 2   | 1   | 2 | 2 |
| Formaldehyde        | pure      | 2-BP   | 0   | 0   | 0   | 0 | 0 |
| Freon               |           | <200   | 0   | 0   | 0   | 0 | 0 |
| Fruit juices        |           | 20     | 0   | 0   | 0   | 0 | 0 |
| Wines               |           | BP     | 0   | 0   | 0   | 0 | 0 |
| Glucose             | all conc. | 20     | 0   | 0   | 0   | 0 | 0 |
| Ethylene glycol     | all conc. | 20     | 0   | 0   | 0   | 0 | 0 |
| Hydrochloric acid   | 0,1       | 20-50  | p1  | p0  | p0  | 0 | 0 |
|                     | 0,1       | 100    | p1s | p0s | p0s | 0 | 0 |
|                     | 0,2       | 20     | p1  | p0  | p0  | 0 | 0 |
|                     | 0,5       | 20     | p1  | p0  | p0  | 0 | 0 |
|                     | 0,5       | 100    | 2   | 2   | 2   | 1 | 0 |
|                     | 1         | 20     | p1  | p0  | p0  | 0 | 0 |
|                     | 1         | 50     | 2   | p0  | p0  | 0 | 0 |
|                     | 2         | 20     | 2   | p0  | p0  | 0 | 0 |
|                     | 2         | 60     | 2   | 2   | 2   | 0 | 0 |
|                     | 3         | 20     | 2   | p0  | p0  | 0 | 0 |
|                     | 3         | 60     | 2   | p1  | p1  | 0 | 0 |
|                     | 3         | 100    | 2   | 2   | 2   | 2 | 0 |
|                     | 5         | 20-70  | 2   | 2   | 2   | 1 | 0 |
|                     | 10        | 20-35  | 2   | 2   | 2   | 1 | 0 |
|                     | 20        | 20-35  | 2   | 2   | 2   | 2 | 1 |
| Hydrogen peroxide   | 5         | 20     | 0   | 0   | 0   | 0 | 0 |
|                     | 10        | 40     | 0   | 0   | 0   | 1 | 1 |
|                     | 15        | 30-40  | 0   | 0   | 0   | 1 | 1 |
|                     | 30        | 40-80  | 0   | 0   | 0   | 2 | 2 |
|                     | 50        | 40     | 0   | 0   | 0   | 2 | 2 |
| Lithium chloride    | 10        | BP     | p0s | p0s | p0s | 0 | 0 |
|                     | 10        | 135    | p1s | p1s | p0s | 0 | 0 |
|                     | 40        | 115    | p1s | p1s | p0s | 0 | 0 |
| Magnesium chlorldie | 2,5       | 20     | p0  | p0  | p0  | 0 | 0 |
|                     | 5         | BP     | p0s | p0s | p0s | 0 | 0 |
| Phosporic acid      | 1,3       | 25     | 1   | 0   | 0   | 2 | 1 |
|                     | 75        | 2      | 1   | 0   | 2   | 2 |   |
|                     | 1,5       | 20     | 2   | 0   | 0   | 2 | 1 |
|                     | 75        | 2      | 1   | 0   | 2   | 2 |   |
| Potassium chromate  | all conc  | BP     | 0   | 0   | 0   | 0 | 0 |
| Potassium hydroxide | 10        | BP     | 0   | 0   | 0   | 0 | 0 |
|                     | 20        | 20     | 0   | 0   | 0   | 0 | 0 |
|                     | 25        | BP     | 0   | 0   | 0   | 1 | 1 |
|                     | 50        | 20     | 0   | 0   | 0   | 0 | 0 |
|                     | 50        | BP     | 1s  | 1s  | 1s  | 2 | 2 |
|                     | 70        | 120    | 1s  | 1s  | 1s  | 2 | 2 |
| Saccharin           | all conc  | 100    | 0   | 0   | 0   | 0 | 0 |
| Salicylic acid      | 5         | 20-85  | 0   | 0   | 0   | 0 | 0 |
|                     | 20        | 100    | 0   | 0   | 0   | 0 | 0 |
| Silver mitrate      | all conc  | 20-BP  | 0   | 0   | 0   | 0 | 0 |
| Sodium bromide      | 5-10, 1   | 20     | p0  | p0  | p0  | 0 | 0 |
|                     | 20        | 80     | p0s | p0s | p0s | 0 | 0 |
| Sodium carbonate    | all conc  | 20-BP  | 0   | 0   | 0   | 0 | 0 |
| Sodium fluoride     | 5-10,1    | 20-100 | 0   | 0   | 0   | 2 | 1 |

|                     |          |     |     |     |     |   |   |
|---------------------|----------|-----|-----|-----|-----|---|---|
| Sodium hydroxide    | 10       | 20  | 0   | 0   | 0   | 0 | 0 |
|                     | 10       | 90  | 0   | 0   | 0   | 0 | 0 |
|                     | 20       | 20  | 0   | 0   | 0   | 0 | 0 |
|                     | 20       | 90  | 0   | 0   | 0   | 0 | 0 |
|                     | 25       | 20  | 0   | 0   | 0   | 0 |   |
|                     | 25       | BP  | 0   | 0   | 0   | 1 | 1 |
|                     | 30       | 20  | 0   | 0   | 0   | 0 | 0 |
|                     | 30       | 100 | 0   | 0   | 0   | 1 | 1 |
|                     | 40       | 80  | 0   | 0   | 0   | 1 | 1 |
|                     | 40       | 100 | 1   | 1   | 0   | 1 | 1 |
|                     | 50       | 60  | 0   | 0   | 0   | 0 | 0 |
|                     | 50       | 90  | 1   | 1   | 0   | 1 | 1 |
|                     | 50       | BP  | 1s  | 1s  | 1s  | 1 | 1 |
|                     | 60       | 90  | 1   | 1   | 0   | 0 | 0 |
|                     | 70       | 90  | 1   | 1   | 0   | 0 | 0 |
|                     | 90       | 300 | 2s  | 1s  | 1s  | 2 | 2 |
| Sodium hypochlorite | 5        | 20  | p1  | p1  | p0  | 0 | 0 |
|                     | 5        | BP  | p1s | p1s | p1s | 0 | 0 |
| Starch              | all conc | 60  | 0   | 0   | 0   | 0 | 0 |
| Sulphuric acid      | 0,1      | 100 | 2   | 1   | 0   | 1 | 0 |
|                     | 0,5      | 20  | 0   | 0   | 0   | 0 | 0 |
|                     | 0,5      | 50  | 1   | 0   | 0   | 0 | 0 |
|                     | 0,5      | 100 | 2   | 1   | 1   | 1 | 0 |
|                     | 1        | 20  | 0   | 0   | 0   | 0 | 0 |
|                     | 1        | 50  | 1   | 0   | 0   | 0 | 0 |
|                     | 1        | 70  | 1   | 0   | 0   | 1 | 0 |
|                     | 1        | 85  | 2   | 1   | 0   | 1 | 0 |
|                     | 1        | 100 | 2   | 1   | 1   | 1 | 0 |
|                     | 2        | 20  | 0   | 0   | 0   | 0 | 0 |
|                     | 2        | 50  | 1   | 0   | 0   | 0 | 0 |
|                     | 2        | 60  | 1   | 0   | 0   | 1 | 0 |
|                     | 3        | 20  | 0   | 0   | 0   | 0 | 0 |
|                     | 3        | 35  | 1   | 0   | 0   | 0 | 0 |
|                     | 3        | 50  | 1   | 0   | 0   | 1 | 0 |
|                     | 3        | 85  | 2   | 1   | 0   | 1 | 1 |
|                     | 3        | 100 | 2   | 2   | 1   | 2 | 1 |
|                     | 5        | 20  | 1   | 0   | 0   | 0 | 0 |
|                     | 5        | 35  | 1   | 0   | 0   | 1 | 0 |
|                     | 5        | 60  | 2   | 1   | 0   | 1 | 0 |
|                     | 5        | 75  | 2   | 1   | 0   | 2 | 1 |
|                     | 5        | 85  | 2   | 2   | 1   | 2 | 1 |
|                     | 5        | BP  | 2   | 2   | 2   | 2 | 1 |
| Sulphuric acid      | 10       | 20  | 2   | 0   | 0   | 1 | 0 |
|                     | 10       | 50  | 2   | 1   | 0   | 2 | 0 |
|                     | 10       | 60  | 2   | 1   | 0   | 2 | 1 |
|                     | 10       | 80  | 2   | 2   | 1   | 2 | 1 |
|                     | 10       | BP  | 2   | 2   | 2   | 2 | 2 |
|                     | 20       | 20  | 2   | 0   | 0   | 2 | 0 |
|                     | 20       | 40  | 2   | 1   | 0   | 2 | 0 |
|                     | 20       | 50  | 2   | 1   | 0   | 2 | 1 |
|                     | 20       | 60  | 2   | 2   | 1   | 2 | 1 |
|                     | 20       | 100 | 2   | 2   | 2   | 2 | 2 |
|                     | 30       | 20  | 2   | 1   | 2   | 1 | 0 |
|                     | 30       | 40  | 2   | 2   | 0   | 2 | 1 |
|                     | 30       | 60  | 2   | 2   | 1   | 2 | 2 |
|                     | 40       | 20  | 2   | 2   | 0   | 2 | 0 |
|                     | 40       | 40  | 2   | 2   | 0   | 2 | 1 |
|                     | 40       | 60  | 2   | 2   | 1   | 2 | 2 |
|                     | 40       | 90  | 2   | 2   | 2   | 2 | 2 |
|                     | 50       | 20  | 2   | 2   | 0   | 2 | 1 |
|                     | 50       | 40  | 2   | 2   | 0   | 2 | 2 |
|                     | 50       | 70  | 2   | 2   | 2   | 2 | 2 |
|                     | 60       | 20  | 2   | 2   | 0   | 2 | 2 |
|                     | 60       | 40  | 2   | 2   | 1   | 2 | 2 |
|                     | 60       | 70  | 2   | 2   | 2   | 2 | 2 |
|                     | 70       | 20  | 2   | 2   | 0   | 2 | 2 |
|                     | 70       | 40  | 2   | 2   | 1   | 2 | 2 |

|  |     |    |   |   |   |   |   |
|--|-----|----|---|---|---|---|---|
|  | 70  | 70 | 2 | 2 | 2 | 2 | 2 |
|  | 80  | 20 | 2 | 1 | 0 | 2 | 2 |
|  | 80  | 40 | 2 | 2 | 1 | 2 | 2 |
|  | 80  | 60 | 2 | 2 | 2 | 2 | 2 |
|  | 85  | 20 | 1 | 0 | 0 | 2 | 2 |
|  | 85  | 30 | 1 | 0 | 0 | 2 | 2 |
|  | 85  | 40 | 1 | 1 | 1 | 2 | 2 |
|  | 85  | 50 | 2 | 1 | 1 | 2 | 2 |
|  | 90  | 20 | 0 | 0 | 0 | 2 | 2 |
|  | 90  | 30 | 0 | 0 | 0 | 2 | 2 |
|  | 90  | 40 | 2 | 1 | 1 | 2 | 2 |
|  | 90  | 70 | 2 | 2 | 2 | 2 | 2 |
|  | 94  | 20 | 0 | 0 | 0 | 2 | 2 |
|  | 94  | 30 | 0 | 0 | 0 | 2 | 2 |
|  | 94  | 40 | 1 | 1 | 1 | 2 | 2 |
|  | 94  | 50 | 1 | 1 | 1 | 2 | 2 |
|  | 96  | 20 | 0 | 0 | 0 | 2 | 2 |
|  | 96  | 30 | 0 | 0 | 0 | 2 | 2 |
|  | 96  | 40 | 0 | 0 | 1 | 2 | 2 |
|  | 96  | 50 | 1 | 1 | 1 | 2 | 2 |
|  | 98  | 30 | 0 | 0 | 0 | 2 | 2 |
|  | 98  | 40 | 0 | 0 | 1 | 2 | 2 |
|  | 98  | 50 | 2 | 0 | 1 | 2 | 2 |
|  | 98  | 80 | 2 | 2 | 2 | 2 | 2 |
|  | 100 | 70 | 0 | 0 |   |   |   |