

### 常用材质适用表

| 化学名           | 俗名          | Glass | PVDF     | PP  | PVC  | SS 316 | PMMA 亚克力 | Hastelloy | PTFE  | FPM | EPDM   | NBR     | PE  |
|---------------|-------------|-------|----------|-----|------|--------|----------|-----------|-------|-----|--------|---------|-----|
|               |             | 玻璃    | 聚偏(二)氟乙烯 | 聚丙烯 | 聚氯乙烯 | 不锈钢    | 聚甲基丙烯酸甲酯 | 哈氏合金      | 聚四氟乙烯 | 氟橡胶 | 三元乙丙橡胶 | 睛基丁二烯橡胶 | 聚乙烯 |
| CH3COOH       | 乙酸          | ○     | ●        | ●   | ●    | ●      | ×        | ●         | ●     | ×   | ●      | ×       | ●   |
| Al2 (SO4) 3   | 硫酸铝         | ●     | ●        | ●   | ●    | ●      | ●        | ●         | ●     | ●   | ●      | ●       | ●   |
| R-NH2         | 氨基          | ●     | ○        | ●   | ×    | ●      | ?        | ●         | ●     | ×   | ○      | ×       | ●   |
| Ca (OH) 2     | 石灰          | ●     | ●        | ●   | ●    | ●      | ●        | ●         | ●     | ●   | ●      | ●       | ●   |
| Ca (OCl) 2    | 次氯酸钙        | ●     | ●        | ●   | ●    | ×      | ●        | ●         | ●     | ●   | ●      | ×       | ●   |
| CuSO4         | 硫酸铜         | ●     | ●        | ●   | ●    | ●      | ●        | ●         | ●     | ●   | ●      | ●       | ●   |
| FeCl3         | 三氯化铁        | ●     | ●        | ●   | ●    | ×      | ●        | ●         | ●     | ●   | ●      | ●       | ●   |
| HF            | 氢氟酸         | ×     | ●        | ●   | ○    | ×      | ×        | ○         | ●     | ●   | ×      | ×       | ●   |
| HCl           | 盐酸          | ●     | ●        | ●   | ●    | ×      | ●        | ●         | ●     | ●   | ×      | ×       | ●   |
| H2O2          | 过氧化氢        | ●     | ●        | ●   | ●    | ●      | ×        | ●         | ●     | ●   | ○      | ×       | ●   |
| HNO3          | 硝酸          | ●     | ●        | ○   | ×    | ○      | ×        | ●         | ●     | ●   | ×      | ×       | ○   |
| H3PO4         | 磷酸          | ●     | ●        | ●   | ●    | ○      | ●        | ●         | ●     | ●   | ●      | ×       | ●   |
| KMnO4         | 高锰酸钾        | ●     | ●        | ●   | ●    | ●      | ●        | ●         | ●     | ●   | ●      | ×       | ●   |
| NaHSO3        | 亚硫酸氢钠       | ●     | ●        | ●   | ●    | ○      | ●        | ●         | ●     | ●   | ●      | ●       | ●   |
| Na2CO3        | 纯碱          | ○     | ●        | ●   | ●    | ●      | ●        | ●         | ●     | ○   | ●      | ●       | ●   |
| NaOH          | 氢氧化钠/火/烧/片碱 | ○     | ●        | ●   | ●    | ●      | ●        | ●         | ●     | ○   | ●      | ○       | ●   |
| NaOCl + NaCl  | 漂白水         | ●     | ●        | ○   | ●    | ×      | ●        | ●         | ●     | ●   | ●      | ○       | ●   |
| H2SO4 (85%)   | 硫酸          | ●     | ●        | ●   | ●    | ○      | ×        | ●         | ●     | ●   | ×      | ×       | ●   |
| H2SO4 (98.5%) | 硫酸          | ●     | ●        | ×   | ×    | ×      | ×        | ●         | ●     | ●   | ×      | ×       | ×   |
| NH4OH         | 氨水          | ●     | ●        | ●   | ●    | ●      | ●        | ●         | ●     | ×   | ●      | ×       | ●   |

●—可以； ○—尚可； ×—不行； ?—未经测试

| 介质   | 聚丙烯<br>PP | PVDF<br>ECTFE(Halair®) | 铝合金<br>Alu | 不锈钢<br>AISI 316 | NBR<br>(Perbunan®) | EPDM<br>(Dutral®) | 聚氨基甲酸酯<br>Polyurethane | PTFE<br>(Teflon®) | PPS-V<br>(Ryton®) | FPM<br>(Viton®) | Santoprene® | PE-UHMW<br>(Polizene®) |
|--|-----------|------------------------|------------|-----------------|--------------------|-------------------|------------------------|-------------------|-------------------|-----------------|-------------|------------------------|
| 乙醛<br>CH <sub>3</sub> CHO                      | A1        | D                      | B          | A               | D                  | A                 | —                      | A                 | A                 | D               | —           | B                      |
| 乙酰胺<br>CH <sub>3</sub> CONH <sub>2</sub>       | A1        | C                      | A          | A               | A                  | A                 | —                      | A                 | A                 | B               | —           | —                      |
| 醋酸乙烯酯<br>CH <sub>3</sub> COOCH:CH <sub>2</sub> | B1        | A2                     | A1         | B               | D                  | B2                | —                      | A2                | —                 | A1              | —           | D                      |
| 乙炔<br>C <sub>2</sub> H <sub>2</sub>            | A1        | A                      | A          | A               | B                  | A                 | D                      | A                 | A                 | A               | —           | —                      |
| 醋酸<br>CH <sub>3</sub> COOH                     | A         | B                      | D          | A               | B                  | A                 | D                      | A                 | A                 | A               | —           | A                      |
| 丙酮<br>(CH <sub>3</sub> ) <sub>2</sub> CO       | A         | D                      | A          | A               | D                  | A                 | D                      | A                 | A                 | D               | A1          | A2                     |
| 脂肪胺<br>Fatty acids                             | A         | A                      | A          | A               | B                  | D                 | D                      | A                 | —                 | A               | D           | A                      |

A=很好; B=好; C=一般, 不推荐使用; D=不好, 不推荐使用; —=没有相关数据; 1=22℃以下耐蚀; 2=48℃以下耐蚀