

pK of common chemical functional groups in HPLC - FAQ

The dissociation constant (pK) is the pH at which 50% of a compound (functional group) is protonated. Following are some examples of Weak Acid and Weak Base Chemical Functional Groups and their approximate pK's.

| Acids | pK |
|-----------------|----------|
| Sulfonic Acid | <1 |
| Phosphate Ester | 2 |
| Carboxylic Acid | 2.5-5 |
| Uracil | 8 |
| Sulfonamide | 7-9 |
| Guanine | 2.2, 9.4 |
| Phenol | 8-10 |

| Bases | pK |
|-----------|------|
| Pyridine | 5 |
| Analine | 5 |
| Amine | 7-10 |
| Imidazole | 7 |

