

CHEM 210 AE

Heats of Neutralization (in kJ/mol)

Group Number	HCl / NaOH	CH ₃ COOH / NaOH	HCl / NH ₄ OH	CH ₃ COOH / NH ₄ OH
1	-68	-62.9	-57.4	-57.8
2	-69.9	-70.1	-67.2	-63.6
3	-61.6	-57.2	-55	-53.7
4	-70	-57.9	-62.8	-57
5	-60.3	-55.2	-52.6	-50.1
6	-66	-61	-60	-56
7	-63.6	-58.5	-57.3	-49.9
AVERAGE	-64.9	-60.8	-58.3	-55.2
Standard Deviation	3.7	5.3	5.0	5.2