

Naming and Classification of Chemical Compounds
Laboratory Exercise #7

Objective: To identify and classify chemical compounds.

Example:

1. HCl – Hydrochloric Acid		Acid
2. Na OH – Sodium Hydroxide		Base
3. NaCl – Sodium Chloride		Salt
4. N ₂ O – Di Nitrogen Oxide		Acid Anhydride
5. K ₂ O – Potassium Oxide		Basic Anhydride
6. Li HSO ₄ – Lithium hydrogen sulfate or Lithium Bi Sulfate		Acid Salt
7. Ca OH NO ₃ – Calcium Hydroxy nitrate		Basic Salt
8. Li K SO ₄ – Lithium Potassium Sulfate		Mixed Salt

Name and classify each of the following as (1) acid, (2) base, (3) normal salt, (4) acid salt, (5) basic salt, (6) acid anhydride, (7) basic anhydride, (8) mixed salt.

	NAME	CLASSIFICATION
A. Mg(OH) ₂	Magnesium Hydroxide	(2) Base
B. KClO ₃	Potassium Chlorate	(1) Acid
C. NaNO ₃	Sodium Nitrate	(5) Basic Salt
D. Fe(OH) ₃	Iron (III) Hydroxide	(7) Basic Anhydride
E. H ₂ SeO ₄	Selenic Acid	(6) Acid Anhydride
F. Ca(ClO) ₂	Calcium Hypochlorite	(2) Base
G. Fe ₂ O ₃	Iron (III) Oxide	(8) Mixed Salt
H. KHSO ₄	Potassium Bi Sulfate	(4) Acid Salt
I. SO ₃	Sulfur Trioxide	(6) Acid Anhydride
J. MgHPO ₄	Di Magnesium Phosphate	(3) Normal Salt
K. KNaSO ₄	Potassium Sodium Sulfate	(8) Mixed Salt
L. N ₂ O ₅	Di Nitrogen Pentoxide	(6) Acid Anhydride
M. Cu ₃ (AsO ₄) ₂	Copper (II) Arsenate	(6) Acid Anhydride
N. K ₂ Cr ₂ O ₇	Potassium Bichromate	(4) Acid Salt
O. Na ₂ S	Sodium Sulfide	(5) Basic Salt
P. HAsO ₃	Hydrogen Arsenate	(1) Acid
Q. ZnO	Zinc Oxide	(7) Basic Anhydride
R. MgNH ₄ PO ₄	Magnesium Ammonium Phosphate	(6) Acid Anhydride
S. Li ₂ O	Lithium Oxide	(2) Base
T. CO ₂	Carbon Dioxide	(6) Acid Anhydride
U. MgOHNO ₃	Magnesium Hydroxide Nitrate	(5) Basic Salt
V. Rb ₂ CO ₃	Rubidium Carbonate	(7) Basic Anhydride
W. KMnO ₄	Potassium Permanganate	(7) Basic Anhydride
X. CdO	Cadmium Oxide	(8) Mixed Salt
Y. Ca(H ₂ PO ₄) ₂	Calcium Dihydrogen Phosphate	(5) Basic Salt
Z. AlBr ₃	Aluminium Bromide	(3) Normal Salt