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Sertraline Hydrochloride

Michelle L. Fehr

Parkland College

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**SERTRALINE HYDROCHLORIDE**

**Generic Name:** Sertraline Hydrochloride
**Trade Name:** Zoloft
**Classification:** ANTIDEPRESSANT, SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRI)

**Chemical Name:** C15H10Cl2N2O
**Molar Mass:** 301.72 g/mol

**Literature Value for Molar Mass:**
Sertraline: molar mass 306.23
Hydrochloride: molar mass 347.76

**Calculating Molar Mass:**
- C: 58.02% (15 x 12.011) g/mol
- H: 3.32% (10 x 1.008) g/mol
- N: 10.34% (2 x 14.007) g/mol
- Cl: 39.34% (2 x 35.45) g/mol

**Expected Structure:**

**Condensed Structure:**

**How the body takes in Sertraline HCl:**
The body takes it up from the GI (gastrointestinal) tract. Sertraline hydrochloride inhibits the production of serotonin (5-HT) hydroxylation in the brain. The drug is given over a course of several days and will result in the decrease of neurotransmitters.

**How the body breaks it down:**
The metabolism of sertraline hydrochloride is greatly reduced before it reaches the systemic circulation in the liver to slow down the metabolism.

**How does the body eliminate Sertraline HCl:**
The elimination of Sertraline hydrochloride is 60-85% in urine and 10-15% in feces.

**After Converting to g/100 mL**
1g = 1000mg

**Dosing for Obsessive Compulsive Disorder:**
For adults taking this medication, dosing by mouth. Take 50mg twice daily per dose. In the case you may have to take up to 200 milligrams per day.

**How Supplied:**
Sertraline/Sertraline Hydrochloride/Zoloft Oral Sol: 100mg, 150mg
Sertraline/Sertraline Hydrochloride/Zoloft Oral Tab: 25mg, 50mg, 100mg

**How the body breaks it down:**
Sertraline hydrochloride is broken down in the liver to slow down the metabolism.

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**Bibliography:**