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Lunesta

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**LUNESTA**

**Eszopiclone**  
By: Mary Kreie CHE-106-001

**Molecular Mass**  
17 moles C (12.01 g/mol) = 204.13 g  
17 moles H (1.01 g/mol) = 17.17 g  
6 moles N (14.01 g/mol) = 84.06 g  
3 moles O (16.00 g/mol) = 48.00 g  
1 mole Cl (35.45 g/mol) = 35.45 g  
Total: 389.31 g/mol

**Water Solubility**  
0.885 mg/mL  
0.885 g/L at 32°C  
0.108 g/100 mL  
Eszopiclone is insoluble in water.

**Chemical Name:**  
1-(4-butyloxazol-5-yl)-1-(2-piperidinyl)-1-(4-piperidinyl)-5-(5-fluorophenyl)-3-(3-methylbutyryl)-2,3-dihydrobenzodiazepine

**Classification:**  
Eszopiclone is used to treat insomnia. According to the Pearson Name’s Drug Guide (2017), there are no unlisted uses for this drug.

**Trade name:**  
Lunesta

**Generic Name:**  
Eszopiclone

**Molecular Formula:**  
C_{17}H_{17}CIN_{6}O_{3}

**Administration & Absorption**  
Eszopiclone should be administered orally. Only meaning the pill should be swallowed by mouth. The drug is rapidly absorbed by the GI tract. The GI tract is the pathway that food travels from your mouth, through the esophagus, stomach, small and large intestine. Once the drug has been absorbed it is believed to interact with GABA receptor complex. This causes the body to engage in sleep-inducing, anti-anxiety, and muscle-relaxing properties.

**Metabolism and Elimination**  
Once the body has used the drug, the body breaks down the medication by extensive hepatic metabolism. Hepatic metabolism means that the breakdown of the medication occurs in the liver. Once metabolized, the body eliminates Eszopiclone primarily by urine.

**Dosage:**  
Adult: 1 milligram orally at bedtime, may increase dosage if needed.

**Supply:**  
Eszopiclone/Lunesta Oral Tab: 1 mg, 2 mg, 3 mg (1 milligram/1 dose) oral tab/1 milligram/1 oral capsule per dose.