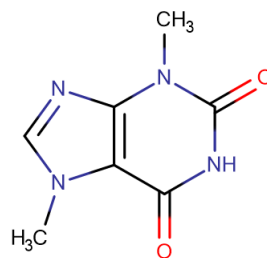


**Product Name** : Theobromine  
**Synonyms** : Diurobromine; NSC 5039; SC-15090  
**Cat No.** : M16101  
**CAS Number** : 83-67-0  
**Molecular Formula** : C<sub>7</sub>H<sub>8</sub>N<sub>4</sub>O<sub>2</sub>  
**Formula Weight** : 180.16  
**Chemical Name** : 3,7-dimethyl-1H-purine-2,6-dione



**Description** : 3,7-Dimethylxanthine. The principle alkaloid in Theobroma cacao (the cacao bean) and other plants. A xanthine alkaloid that is used as a bronchodilator and as a vasodilator. It has a weaker diuretic activity than THEOPHYLLINE and is also a less powerful stimulant of smooth muscle. It has practically no stimulant effect on the central nervous system. It was formerly used as a diuretic and in the treatment of angina pectoris and hypertension.

**Pathway** : Endocrinology/Hormones

**Target** : AChR

**Receptor** : Adenosine receptor; PDE

**Solubility** : Water: 330 mg/L

**SMILES** : O=C1N(C)C2=C(N(C)C(=O)N2)C1=O

**Storage** : (-20°C)

**Stability** : ≥ 2 years

**Reference** :

1.Chou CC, Vickroy TW. Am J Vet Res. 2003 Feb;64(2):216-24.