

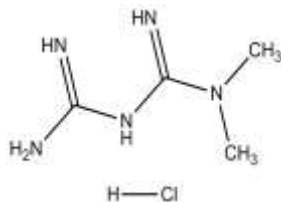
## Metformin Hydrochloride

**ALTERNATE NAME** 1,1-Dimethylbioguanide Hydrochloride

**CATALOG #:** 1691-5G

**AMOUNT:** 5 g

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>4</sub>H<sub>11</sub>N<sub>5</sub>·HCl

**MOLECULAR WEIGHT:** 165.62

**CAS NUMBER:** 1115-70-4

**APPEARANCE:** White to off-white solid

**SOLUBILITY:** Water (50 mg/ml)

**PURITY:** >99%

**STORAGE:** Store at +4°C. Hygroscopic!

**DESCRIPTION:** An anti-diabetic agent. It reduces blood glucose levels and improves insulin sensitivity. Its metabolic effects, including the inhibition of hepatic gluconeogenesis, are mediated at least in part by activation of the LKB1-AMPK (AMP-activated protein kinase) pathway. Metformin helps reduce LDL cholesterol and triglyceride levels and is not associated with weight gain, and is the only anti-diabetic drug that has been conclusively shown to prevent the cardiovascular complications of diabetes.

**REFERENCES:** *Merk Index* **14**, 5938

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**FOR RESEARCH USE ONLY! Not to be used in humans.**

**RELATED PRODUCTS:**

- AICAR (Cat. No. 1687-50)
- Dorsomorphin (Cat. No. 1686-5)