Product Name: Dimaprit dihydrochloride
CAS Number: 23256-33-9
IUPAC Name: S-(3-Dimethylaminopropyl)isothiourea dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** C_6H_{15}N_3S.2HCl
- **Batch Molecular Weight:** 234.19
- **Physical Appearance:** White solid
- **Solubility:**
  - Water to 100 mM
  - Phosphate buffered saline to 100 mM with gentle warming
- **Storage:** Desiccate at RT

![Batch Molecular Structure](image)

2. ANALYTICAL DATA

- **Melting Point:** Between 161 - 164°C
- **HPLC:** Shows 99.2% purity
- **^1H NMR:** Consistent with structure
- **Mass Spectrum:** Consistent with structure
- **Microanalysis:**
  - **Theoretical:** Carbon 30.77, Hydrogen 7.32, Nitrogen 17.94, Chlorine 30.28
  - **Found:** Carbon 30.62, Hydrogen 7.53, Nitrogen 17.67, Chlorine 30
**Product Name:** Dimaprit dihydrochloride  
**CAS Number:** 23256-33-9  
**IUPAC Name:** S-(3-Dimethylaminopropyl)isothiourea dihydrochloride

**Description:**
Selective H₂ agonist with central effects upon systemic administration. Also inhibits nNOS (IC₅₀ = 49 μM).

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C₇H₁₅N₃S·2HCl
- **Batch Molecular Weight:** 234.19
- **Physical Appearance:** White solid
- **Minimum Purity:** >99%

**Storage:** Desiccate at RT

**Solubility & Usage Info:**
- water to 100 mM
- phosphate buffered saline to 100 mM with gentle warming

**Stability and Solubility Advice:**
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).
Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
- **SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
- **SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**