

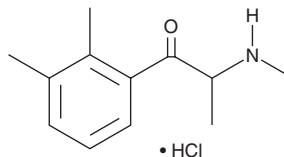
# PRODUCT INFORMATION



## 2,3-Dimethylmethcathinone (hydrochloride)

Item No. 11225

**CAS Registry No.:** 1797981-99-7  
**Formal Name:** 1-(2,3-dimethylphenyl)-2-(methylamino)propan-1-one, monohydrochloride  
**Synonym:** 2,3-DMMC  
**MF:** C<sub>12</sub>H<sub>17</sub>NO • HCl  
**FW:** 227.7  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 252, 292 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥5 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

For long term storage, we suggest that 2,3-dimethylmethcathinone (2,3-DMMC) (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

2,3-DMMC (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the 2,3-DMMC (hydrochloride) in the solvent of choice. 2,3-DMMC (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 2,3-DMMC (hydrochloride) in ethanol, DMSO, and DMF is approximately 5, 2.5, and 1 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 2,3-DMMC (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 2,3-DMMC (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

2,3-DMMC (hydrochloride) is a potential designer drug with combined features of amphetamines, cathinones, and phenethylamines. It is structurally related to 4-methylmethcathinone, (Item No. 10801), a psychoactive compound that has been identified in products sold as bath salts and plant food.<sup>1-3</sup> The physiological and toxicological properties of this compound have not been elucidated. This product is intended for research and forensic applications.

### References

1. Gibbons, S. and Zloh, M. An analysis of the 'legal high' mephedrone. *Bioorg. Med. Chem. Lett.* **20(14)**, 4135-39 (2010).
2. James, D., Adams, R.D., Spears, R., *et al.* Clinical characteristics of mephedrone toxicity reported to the UK National Poisons Information Service. *Emerg. Med. J.* (2011).
3. Jankovics, P., Váradi, A., Tölgyesi, L., *et al.* Identification and characterization of the new designer drug 4'-methylethcathinone (4-MEC) and elaboration of a novel liquid chromatography-tandem mass spectrometry (LC-MS/MS) screening method for seven different methcathinone analogs. *Forensic Sci. Int.* (2011).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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