

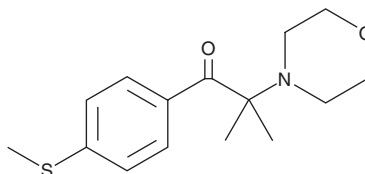
# PRODUCT INFORMATION



## 2-methyl-4'-(methylthio)-2-Morpholinopropiophenone

Item No. 21651

**CAS Registry No.:** 71868-10-5  
**Formal Name:** 2-methyl-1-(4-(methylthio)phenyl)-2-morpholinopropan-1-one  
**Synonyms:** Caccure 907, Irgacure 907, MMMP, MMTMP, MTMP  
**MF:** C<sub>15</sub>H<sub>21</sub>NO<sub>2</sub>S  
**FW:** 279.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 230, 307 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.

### Description

2-methyl-4'-(methylthio)-2-Morpholinopropiophenone (MMMP; Item No. 21651) is an analytical reference standard that is structurally characterized as a substituted cathinone. It is a photoinitiator that almost instantaneously generates free radicals to induce polymerization in the production of UV curable inks, to speed drying during printing, and in colored coatings.<sup>1</sup> MMMP is toxic to human peripheral blood mononuclear cells *in vitro* (250 µg/ml) through a caspase 3/7-dependent mechanism.<sup>2</sup> This product is intended for research and forensic applications.

### References

1. Buback, M. and Kuelpmann, A. A suitable photoinitiator for pulsed laser-induced free-radical polymerization *Macromol. Chem. Phys.* **204**(4), 632-637 (2003).
2. Kawasaki, Y., Yagi, K., Tsuboi, C., et al. The polymerization agent, 2-methyl-4'-(methylthio)-2-morpholinopropiophenone induces caspases-3/7 in human blood mononuclear cells *in vitro*. *Biol. Pharm. Bull.* **36**(10), 1640-1645 (2013).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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