# **PRODUCT** INFORMATION



4-MTA (hydrochloride)

Item No. 11862

CAS Registry No.:	94784-92-6	
Formal Name:	α-methyl-4-(methylthio)-benzeneethanamine,	
	monohydrochloride	
Synonyms:	4-Methylthioamphetamine, P 1882	NH <sub>2</sub>
MF:	C <sub>10</sub> H <sub>15</sub> NS • HCI	
FW:	217.8	
Purity:	≥98%	S <sup>−</sup> S <sup>−</sup>
UV/Vis.:	λ <sub>max</sub> : 258 nm	• HCI
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

4-MTA (Item No. 11862), is a selective serotonergic agent which increases serotonin release, blocks its re-uptake (IC<sub>50</sub> = 102 nM), and inhibits monoamine oxidase  $A^{1-3}$  The detection of this designer drug in serum and urine has been described, as has its metabolism.<sup>3-6</sup> This product is intended for research and forensic applications.

## References

- 1. Huang, X., Marona-Lewicka, D., and Nichols, D.E. p-Methylthioamphetamine is a potent new non-neurotoxic serotonin-releasing agent. Eur. J. Pharmacol. 229(1), 31-38 (1992).
- 2. Gobbi, M., Moia, M., Pirona, L., et al. p-Methylthioamphetamine and 1-(m-chlorophenyl)piperazine, two non-neurotoxic 5-HT releasers in vivo, differ from neurotoxic amphetamine derivatives in their mode of action at 5-HT nerve endings in vitro. J. Neurochem. 82(6), 1435-1443 (2002).
- 3. Staack, R.F. and Maurer, H.H. Metabolism of designer drugs of abuse. Curr. Drug Metab. 6(3), 259-274 (2005).
- 4. Wohlfarth, A., Weinmann, W., and Dresen, S. LC-MS/MS screening method for designer amphetamines, tryptamines, and piperazines in serum. Anal. Bioanal. Chem. 396(7), 2403-2414 (2010).
- 5. Kerrigan, S., Banuelos, S., Perrella, L., et al. Simultaneous detection of ten psychedelic phenethylamines in urine by gas chromatography-mass spectrometry. J. Anal. Toxicol. 35(7), 459-469 (2011).
- Ewald, A.H., Peters, F.T., Weise, M., et al. Studies on the metabolism and toxicological detection of the 6. designer drug 4-methylthioamphetamine (4-MTA) in human urine using gas chromatography-mass spectrometry. J. Chromatogr. B Analyt. Technol. Biomed. Life Sci. 824(1-2), 123-131 (2005).

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.

Copyright Cayman Chemical Company, 06/15/2023

## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM