

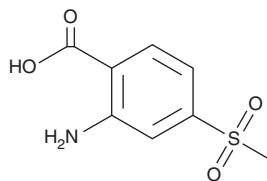
PRODUCT INFORMATION



2-Amino-4-methylsulfonyl benzoic Acid

Item No. 46033

CAS Registry No.: 393085-45-5
Formal Name: 2-amino-4-(methylsulfonyl)-benzoic acid
Synonym: AMBA
MF: $C_8H_9NO_4S$
FW: 215.2
Purity: $\geq 95\%$
Supplied as: A solid
Storage: $-20^\circ C$
Stability: ≥ 4 years



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

Laboratory Procedures

2-Amino-4-methylsulfonyl benzoic acid (AMBA) is supplied as a solid. A stock solution may be made by dissolving the AMBA in the solvent of choice, which should be purged with an inert gas. AMBA is soluble (≥ 10 mg/ml) in DMSO.

Description

AMBA is a metabolite of the herbicide mesotrione.^{1,2} It is produced by *Bacillus* cultures incubated with mesotrione and is a urinary metabolite of mesotrione in rats.^{2,3} It is toxic to *V. fischeri* ($IC_{50} = 17.8$ mg/ml).⁴ AMBA has been found in agricultural soil and water samples where crops have been treated with mesotrione.¹

References

1. Alferness, P. and Wiebe, L. Determination of mesotrione residues and metabolites in crops, soil, and water by liquid chromatography with fluorescence detection. *J. Agric. Food Chem.* **50**(14), 3926-3934 (2002).
2. Durand, S., Sancelme, M., Besse-Hoggan, P., et al. Biodegradation pathway of mesotrione: Complementarities of NMR, LC-NMR and LC-MS for qualitative and quantitative metabolic profiling. *Chemosphere* **81**(3), 372-380 (2010).
3. Gledhill, A.J., Jones, B.K., and Laird, W.J. Metabolism of 2-(4-methylsulphonyl-2-nitrobenzoyl)-1,3-cyclohexanedione (mesotrione) in rat and mouse. *Xenobiotica* **31**(10), 733-747 (2001).
4. Bonnet, J.L., Bonnemoy, F., Dusser, M., et al. Toxicity assessment of the herbicides sulcotrione and mesotrione toward two reference environmental microorganisms: *Tetrahymena pyriformis* and *Vibrio fischeri*. *Arch. Environ. Contam. Toxicol.* **55**(4), 576-583 (2008).

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, 07/02/2026

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