

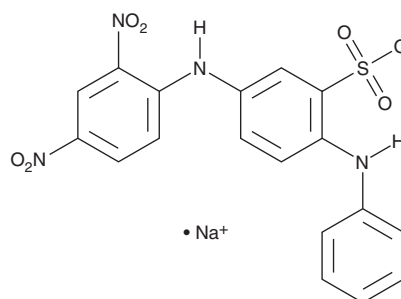
PRODUCT INFORMATION



Acid Orange 3

Item No. 44539

CAS Registry No.: 6373-74-6
Formal Name: 5-[(2,4-dinitrophenyl)amino]-2-(phenylamino)-benzenesulfonic acid, monosodium salt
Synonyms: AO3, C.I. 10385
MF: $C_{18}H_{13}N_4O_7S \cdot Na$
FW: 452.4
Abs. Max: 372 nm
UV/Vis.: λ_{max} : 204, 294, 344 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



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

Laboratory Procedures

Acid orange 3 is supplied as a solid. A stock solution may be made by dissolving the acid orange 3 in the solvent of choice, which should be purged with an inert gas. Acid orange 3 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

Acid orange 3 is an acid nitro dye.¹ It displays an absorbance maximum of 372 nm. Acid orange 3 (0.01-10 μ g/ml) does not induce foci formation in an *in vitro* carcinogenicity assay using T1 mouse embryonic fibroblasts.² It induces allergic contact dermatitis in guinea pigs.³ Formulations containing acid orange 3 have been used as semipermanent hair dyes and textile dyes.

References

1. Li, J.-T., Bai, B., and Song, Y.-L. Removal of acid orange 3 from aqueous solution by activated carbon adsorption. *Asian J. Chem.* **22**(1), 439-447 (2010).
2. Kowalski, L.A., Assi, K.P., Wee, R.K., *et al.* In vitro prediction of carcinogenicity using a bovine papillomavirus DNA-carrying C3H/10T1/2 cell line (T1). II: Results from the testing of 100 chemicals. *Environ. Mol. Mutagen.* **37**(3), (2001).
3. Dinardo, J. and Draelos, Z.D. An animal model assessment of common dye-induced allergic contact dermatitis. *J. Cosmet. Sci.* **58**(3), 209-214 (2007).

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, 12/19/2025

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