SZABO SCANDIC

Part of Europa Biosite

# Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand


**SZABO-SCANDIC HandelsgmbH**

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

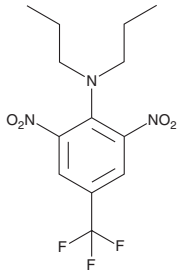
linkedin.com/company/szaboscandic

# PRODUCT INFORMATION

## Trifluralin

*Item No. 35476*

| | |
|---|---|
| **CAS Registry No.:** | 1582-09-8 |
| **Formal Name:** | 2,6-dinitro-N,N-dipropyl-4-(trifluoromethyl)-benzenamine |
| **MF:** | $C_{13}H_{16}F_3N_3O_4$ |
| **FW:** | 335.3 |
| **Purity:** | ≥98% |
| **UV/Vis.:** | $\lambda_{max}$: 273 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

Trifluralin is supplied as a solid. A stock solution may be made by dissolving the trifluralin in the solvent of choice, which should be purged with an inert gas. Trifluralin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of trifluralin in these solvents is approximately 10, 25, and 20 mg/ml, respectively.

### Description

Trifluralin is a dinitroaniline herbicide.[1,2] It inhibits photosynthetic electron transport, ATP synthesis, and cytochrome *f* reduction in isolated spinach chloroplasts in a concentration-dependent manner.[1] Trifluralin (1.68 kg/ha) decreases cotton (*G. hirsutum*) plant height when applied to the soil prior to planting.[2] It induces reactive oxygen species (ROS) production in V79 Chinese hamster lung fibroblasts and genotoxicity in isolated human peripheral lymphocytes when used at concentrations ranging from 2.5 to 500 µM.[3] Trifluralin has been found as a contaminant in freshwater fish.[4] Formulations containing trifluralin have been used as herbicides in agricultural, residential, commercial, and industrial settings.

### References


1. Robinson, S.J., Yocum, C.F., and Ikuma, H. Inhibition of chloroplast electron transport reactions by trifluralin and diallate. *Plant Physiol.* **60(6)**, 840-844 (1977).
2. Kappelman, A.J., Jr. and Buchanan, A. Influence of fungicides, herbicides and combinations on emergence and seedling growth of cotton. *Agronomy* **60**, 660-662 (1968).
3. Kiliç, Z.S., Aydin, S., Bucurgat, Ü.Ü., et al. In vitro genotoxicity assessment of dinitroaniline herbicides pendimethalin and trifluralin. *Food Chem. Toxicol.* **113**, 90-98 (2018).
4. Camanzo, J., Rice, C.P., Jude, D.J., *et al.* Organic priority pollutants in nearshore fish from 14 lake Michigan tributaries and embayments, 1983. *J. Great Lakes Res.* **13(3)**, 296-309 (1987).





**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