

**Product Name:** Deferoxamine mesylate

**Catalog No.:** 5764

**Batch No.:** 4

CAS Number: 138-14-7

IUPAC Name: *N*<sup>4</sup>-[5-[[4-[[5-(Acetylhydroxyamino)pentyl]amino-1,4-dioxobutyl]hydroxyamino]pentyl]-*N*<sup>1</sup>-(5-aminopentyl)-*N*<sup>1</sup>-hydroxybutanediamide methanesulfonate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>25</sub>H<sub>48</sub>N<sub>6</sub>O<sub>8</sub>·CH<sub>4</sub>O<sub>3</sub>S.

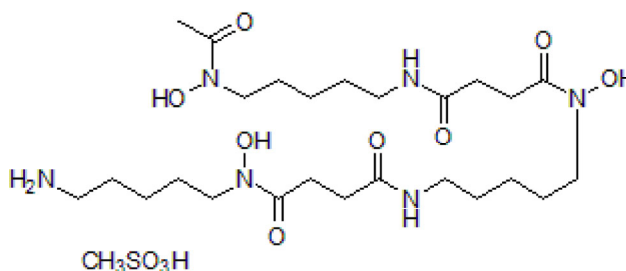
**Batch Molecular Weight:** 656.79

**Physical Appearance:** White solid

**Solubility:** water to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	47.55	7.98	12.8
Found	47.7	8.04	12.71

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**Description:**

Deferoxamine mesylate is an iron chelator. Also hypoxia mimetic and inhibitor of ferroptosis. Has neuroprotective effects in animal models of stroke, traumatic brain injury and neurodegenerative diseases.

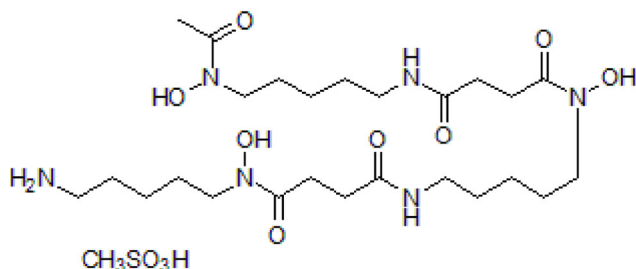
**Physical and Chemical Properties:**

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Batch Molecular Weight: 656.79

Physical Appearance: White solid

**Batch Molecular Structure:**



**Storage:** Store at -20°C. This product is packaged under an inert atmosphere.

**Solubility & Usage Info:**

water to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Kosyakovsky et al** (2019) Quantifying intranasally administered deferoxamine in rat brain tissue with mass spectrometry. ACS Chem.Neurosci. **10** 4571. PMID: 31573798.

**Chau et al** (2005) Identification of novel small molecule inhibitors of hypoxia-inducible factor-1 that differentially block hypoxia-inducible factor-1 activity and hypoxia-inducible factor-1alpha induction in response to hypoxic stress and growth factors. Cancer Res. **65** 4918. PMID: 15930314.

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bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956