



# 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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

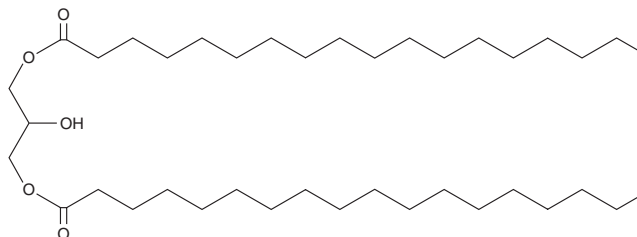
# PRODUCT INFORMATION



## 1,3-Distearoyl Glycerol

Item No. 26946

**CAS Registry No.:** 504-40-5  
**Formal Name:** octadecanoic acid, 1,1'-(2-hydroxy-1,3-propanediyl) ester  
**Synonyms:** DG(18:0/0:0/18:0), 1,3-Distearin, NSC 404229  
**MF:** C<sub>39</sub>H<sub>76</sub>O<sub>5</sub>  
**FW:** 625.0  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

1,3-Distearoyl glycerol is supplied as a solid. A stock solution may be made by dissolving the 1,3-distearoyl glycerol in the solvent of choice, which should be purged with an inert gas. 1,3-Distearoyl glycerol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 1,3-distearoyl glycerol in these solvents is approximately 0.25, 30, and 20 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 1,3-distearoyl glycerol can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 1,3-distearoyl glycerol in PBS, pH 7.2, is approximately 0.7 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

1,3-Distearoyl glycerol is a diacylglycerol that contains stearic acid (Item No. 10011298) at the *sn*-1 and *sn*-3 positions. It has been found in wheat bran extract.<sup>1</sup> 1,3-Distearoyl glycerol has been used in the synthesis of prodrug forms of the non-steroidal anti-inflammatory drugs (NSAIDs) ibuprofen, naproxen (Item No. 70290), and diclofenac (Item Nos. 70680 | 22983) that have reduced ulcerogenicity.<sup>2-4</sup>

### References

1. Prinsen, P., Gutiérrez, A., Faulds, C.B., et al. Comprehensive study of valuable lipophilic phytochemicals in wheat bran. *J. Agric. Food Chem.* **62(7)**, 1664-1673 (2014).
2. Khan, M.S. and Akhter, M. Synthesis, pharmacological activity and hydrolytic behavior of glyceride prodrugs of ibuprofen. *Eur. J. Med. Chem.* **40(4)**, 371-376 (2005).
3. Redasani, V.K. and Bari, S.B. Synthesis and evaluation of glyceride prodrugs of naproxen. *Open J. Med. Chem.* **3(3)**, 87-92 (2013).
4. Khan, M.S.Y. and Akhter, M. Synthesis, biological evaluation and kinetic studies of glyceride prodrugs of diclofenac. *Indian J. Exp. Biol.* **42(11)**, 1066-1072 (2004).

#### 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, 06/05/2020

#### 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