# **PRODUCT INFORMATION**



## 1,3-Dimyristoyl Glycerol

Item No. 26925

CAS Registry No.: 7770-09-4

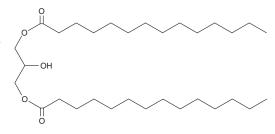
tetradecanoic acid, 2-hydroxy-1,3-Formal Name:

propanediyl ester

Synonyms: DG(14:0/0:0/14:0), 1,3-Dimyristin,

NSC 404226

MF:  $C_{31}H_{60}O_{5}$ FW: 512.8 **Purity:** ≥98% 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**

1,3-Dimyristoyl glycerol is supplied as a solid. A stock solution may be made by dissolving the 1,3-dimyristoyl glycerol in the solvent of choice, which should be purged with an inert gas. 1,3-Dimyristoyl glycerol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 1,3-dimyristoyl glycerol in these solvents is approximately 30, 5, 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-dimyristoyl glycerol can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 1,3-dimyristoyl glycerol in PBS, pH 7.2, is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

1,3-Dimyristoyl glycerol is a diacylglycerol that contains myristic acid (Item No. 13351) at the sn-1 and sn-3 positions. It has been used as an internal standard for the quantification of free fatty acids, monoacylglycerols, and diacylglycerols in the subcutaneous fat of raw and dry-cured Iberian ham.<sup>1</sup>

### Reference

1. Narváez-Rivas, M., Vicario, I.M., Constante, E.G., et al. Changes in the concentrations of free fatty acid, monoacylglycerol, and diacylglycerol in the subcutaneous fat of Iberian ham during the dry-curing process. J. Agric. Food Chem. 55(26), 10953-10961 (2007).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

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, 12/20/2022

#### **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