# PRODUCT INFORMATION



## 1,2,3-Tristearoyl Glycerol

Item No. 23335

CAS Registry No.: 555-43-1

octadecanoic acid, 1,1',1"-(1,2,3-propanetriyl) ester Formal Name: Synonyms: Glycerol Trioctadecanoate, TG(18:0/18:0/18:0),

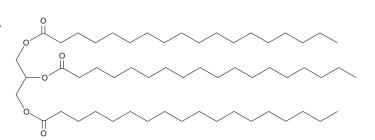
Trioctadecanoyl Glycerol, Tristearin

MF:  $C_{57}H_{110}O_{6}$ 891.5 FW: ≥98% **Purity:** 

Supplied as: A crystalline solid

Storage: 4°C Stability:

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



### **Laboratory Procedures**

1,2,3-Tristearoyl glycerol is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,2,3-tristearoyl glycerol in the solvent of choice, which should be purged with an inert gas. 1,2,3-Tristearoyl glycerol is soluble in the organic solvent chloroform at a concentration of approximately 10 mg/ml.

### Description

1,2,3-Tristearoyl glycerol is a triacylglycerol that contains stearic acid (Item No. 10011298) at the sn-1, sn-2, and sn-3 positions. It has been found in beef fat and fully hydrogenated soybean, rapeseed, cottonseed, and palm oils. 1,2,3-Tristearoyl glycerol has been used to form the lipid matrices of solid lipid nanoparticles (SLNs).<sup>2</sup> Formulations containing 1,2,3-tristearoyl glycerol have been used as skin conditioners and thickening agents in cosmetics.

#### References

- 1. deMan, L., deMan, J.M., Blackman, B., et al. Polymorphic behavior of some fully hydrogenated oils and their mixtures with liquid oil. J. Am. Oil. Chem. Soc. 66, 1777-1780 (1989).
- 2. Esposito, E., Sguizzato, M., Drechsler, M., et al. Data on scaling up and in vivo human study of progesterone lipid nanoparticles. Data Brief 14, 639-642 (2017).

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.

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