



Product Information

Product ID G4796

CAS No. 142-18-7

Chemical Name

Synonym Monolaurin

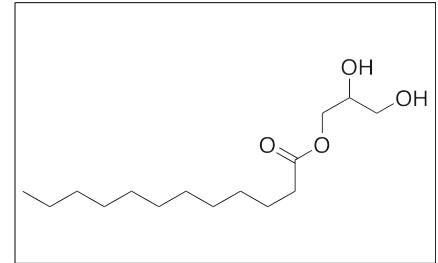
Formula $C_{15}H_{30}O_4$

Formula Wt. 274.40

Melting Point

Purity $\geq 98\%$

Solubility



Bulk quantities available upon request

Product ID	Size
G4796	25 g
G4796	100 g

Store Temp Ambient

Ship Temp Ambient

Description Glycerol monolaurate is a surfactant and emulsifier that exhibits antibacterial, antifungal, and anti-inflammatory activities. This compound can be found in coconut oil; it displays antimicrobial benefit against both gram positive and gram negative bacteria, including species of *Staphylococcus*, *Streptococcus*, *Gardnerella*, *Candida*, and *Haemophilus*. In clinical settings, glycerol monolaurate decreases production of pro-inflammatory cytokines such as IL-8 and TNF- α , decreasing *Staphylococcus* exotoxin production and preventing toxic shock syndrome. In primates, this compound inhibits mucosal transmission of simian immunodeficiency virus (SIV) through the inhibition of pro-inflammatory cytokine and mucosal signaling.

References Schlievert PM, Peterson ML. Glycerol monolaurate antibacterial activity in broth and biofilm cultures. *PLoS One*. 2012;7(7):e40350. PMID: 22808139.

Strandberg KL, Peterson ML, Lin YC, et al. Glycerol monolaurate inhibits *Candida* and *Gardnerella vaginalis* in vitro and in vivo but not *Lactobacillus*. *Antimicrob Agents Chemother*. 2010 Feb;54(2):597-601. PMID: 20008774.

Strandberg KL, Peterson ML, Schaefer MM, et al. Reduction in *Staphylococcus aureus* growth and exotoxin production and in vaginal interleukin 8 levels due to glycerol monolaurate in tampons. *Clin Infect Dis*. 2009 Dec 1;49(11):1711-7. PMID: 19863450.

Lin YC, Schlievert PM, Anderson MJ, et al. Glycerol monolaurate and dodecylglycerol effects on *Staphylococcus aureus* and toxic shock syndrome toxin-1 in vitro and in vivo. *PLoS One*. 2009 Oct 19;4(10):e7499. PMID: 19838303.

Li Q, Estes JD, Schlievert PM, et al. Glycerol monolaurate prevents mucosal SIV transmission. *Nature*. 2009 Apr 23;458(7241):1034-8. PMID: 19262509.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.