

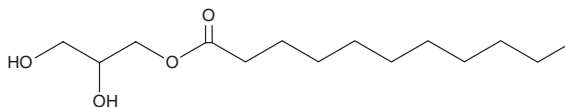
# PRODUCT INFORMATION



## 1-Undecanoyl-*rac*-glycerol

Item No. 28763

CAS Registry No.: 64633-19-8  
Formal Name: undecanoic acid,  
2,3-dihydroxypropyl ester  
Synonyms: MG(11:0/0:0/0:0), 1-Undecanoin  
MF:  $C_{14}H_{28}O_4$   
FW: 260.4  
Purity:  $\geq 95\%$   
UV/Vis.:  $\lambda_{\max}$ : 217 nm  
Supplied as: A crystalline solid  
Storage:  $-20^{\circ}\text{C}$   
Stability:  $\geq 4$  years



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

### Laboratory Procedures

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

### Description

1-Undecanoyl-*rac*-glycerol is a monoacylglycerol that contains undecanoic acid (Item No. 19721) at the *sn*-1 position. It completely inhibits the growth of the bacteria *B. cereus*, *B. subtilis*, *M. luteus*, *E. faecalis*, and *S. aureus* when used at concentrations ranging from 250 to 1,500 mg/L.<sup>1</sup> 1-Undecanoyl-*rac*-glycerol (0.1 and 0.3 mg/ml) also has antifungal activity against *K. marxianus*, *S. cerevisiae*, and *C. maltosa*.<sup>2</sup>

### References

1. Buňková, L., Buňka, F., Janiš, R., *et al.* Comparison of antibacterial effect of seven 1-monoglycerides on food-borne pathogens or spoilage bacteria. *Acta Vet. Brno.* **80(1)**, 29-39 (2011).
2. Bartošová, E., Špic'ková, Z., Pospíšilová, O., *et al.* The influence of fatty acids and their derivatives on the growth of *Kluyveromyces*, *Saccharomyces*, and *Candida* species. *CHIMIA* **59(10)**, 732-734 (2005).

#### 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.

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