

PRODUCT INFORMATION



6-Trehalose Monooleate

Item No. 42211

CAS Registry No.: 338733-38-3

Formal Name: α -D-glucopyranosyl- α -D-glucopyranoside, 6-(9Z)-9-octadecenoate

Synonym: 6-TMO

MF: $C_{30}H_{54}O_{12}$

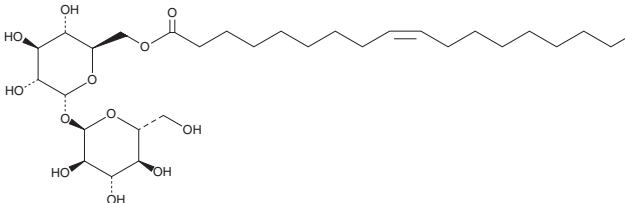
FW: 606.7

Purity: $\geq 95\%$

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

6-Trehalose monooleate is supplied as a solid. A stock solution may be made by dissolving the 6-trehalose monooleate in the solvent of choice, which should be purged with an inert gas. 6-Trehalose monooleate is slightly soluble (0.1-1 mg/ml) in chloroform and methanol.

Description

6-Trehalose monooleate is a glycolipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of immunosuppressants *ex vivo*.¹ LNPs containing 6-trehalose monooleate and encapsulating cyclosporin A (Item No. 12088) preferentially accumulate in the stratum corneum over the epidermis and dermis in a tape-stripping test using isolated rabbit ear skin. 6-Trehalose monooleate has also been used as an anti-aggregation agent for proteins.²

References

1. Trombino, S., Russo, R., Mellace, S., *et al.* Solid lipid nanoparticles made of trehalose monooleate for cyclosporin-A topic release. *J. Drug Deliv. Sci. Technol.* **49**, 563-569 (2019).
2. Kale, S.S. and Akamanchi, K.G. Trehalose monooleate: A potential antiaggregation agent for stabilization of proteins. *Mol. Pharm.* **13**(12), 4082-4093 (2016).

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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