

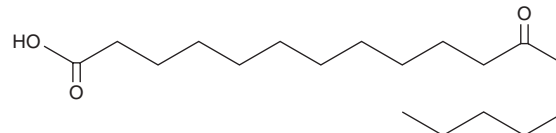
PRODUCT INFORMATION



12-oxo Stearic Acid

Item No. 40259

CAS Registry No.: 925-44-0
Formal Name: 12-oxo-octadecanoic acid
Synonyms: 12-keto Octadecanoic Acid, 12-keto Stearic Acid, 12-oxo C18:0, 12-oxo Octadecanoic Acid, NSC 2103
MF: C₁₈H₃₄O₃
FW: 298.5
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥3 years



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

Laboratory Procedures

12-oxo Stearic acid is supplied as a solid. A stock solution may be made by dissolving the 12-oxo stearic acid in the solvent of choice, which should be purged with an inert gas. 12-oxo Stearic acid is soluble in chloroform.

Description

12-oxo Stearic acid is a saturated oxo fatty acid (SOFA) and metabolite of ricinoleic acid (Item No. 10009369) that has been found in cow and goat milk.^{1,2} Dietary administration of 12-oxo stearic acid (0.25%) induces encephalomalacia in chicks fed a vitamin E-deficient diet.³

References

1. Alves, S.P., Araujo, C.M., Queiroga, R.C., *et al.* New insights on the metabolism of ricinoleic acid in ruminants. *J. Dairy Sci.* **100(10)**, 8018-8032 (2017).
2. Kokotou, M.G., Batsika, C.S., Mantzourani, C., *et al.* Free saturated oxo fatty acids (SOFAs) and ricinoleic acid in milk determined by a liquid chromatography-high-resolution mass spectrometry (LC-HRMS) method. *Metabolites* **11(1)**, 46 (2021).
3. Kokatnur, M.G., Okui, S., Kummerow, F.A., *et al.* Effect of long chain keto acids on encephalomalacia in chicks. *Proc. Soc. Exp. Biol. Med.* **104**, 170-171 (12/05/2023).

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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