

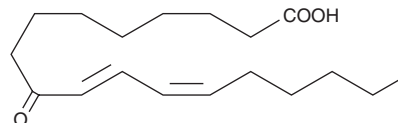
# PRODUCT INFORMATION



## 9-OxoODE

Item No. 38420

**CAS Registry No.:** 54232-59-6  
**Formal Name:** 9-oxo-10E,12Z-octadecadienoic acid  
**MF:** C<sub>18</sub>H<sub>30</sub>O<sub>3</sub>  
**FW:** 294.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 279 nm  
**Supplied as:** A solution in ethanol  
**Storage:** -80°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

9-OxoODE is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 9-OxoODE in these solvents is approximately 50 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 9-OxoODE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 9-OxoODE in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

9-OxoODE results from oxidation of the allylic hydroxyl of either 9(S)- or 9(R)-HODE. Rabbit reticulocyte plasma and mitochondrial membranes contain both 9- and 13-oxoODEs, representing about 2% of the total linoleate residues in the membranes. Most of these oxidized linoleate residues are esterified to membrane lipids.<sup>1-3</sup>

### References

1. Kühn, H., Belkner, J., and Wiesner, R. Subcellular distribution of lipoxygenase products in rabbit reticulocyte membranes. *Eur. J. Biochem.* **191**(1), 221-227 (1990).
2. Kühn, H., Belkner, J., and Wiesner, R. Metabolism of polyenoic fatty acids by rabbit reticulocytes. Intracellular action of the erythroid lipoxygenase on membrane lipids. *Biomed. Biochim. Acta* **49**(2-3), S25-S30 (1990).
3. Kühn, H., Belkner, J., Wiesner, R., *et al.* Occurrence of 9- and 13-keto-octadecadienoic acid in biological membranes oxygenated by the reticulocyte lipoxygenase. *Arch. Biochem. Biophys.* **279**(2), 218-224 (1990).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM