

# PRODUCT INFORMATION



## 2-chloro Stearic Acid

Item No. 26108

**CAS Registry No.:** 56279-49-3  
**Formal Name:** 2-chloro-octadecanoic acid  
**Synonym:**  $\alpha$ -Chlorostearic acid  
**MF:** C<sub>18</sub>H<sub>35</sub>ClO<sub>2</sub>  
**FW:** 318.9  
**Purity:**  $\geq$ 95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 2 years



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

### Laboratory Procedures

2-chloro Stearic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-chloro stearic acid in the solvent of choice, which should be purged with an inert gas. 2-chloro Stearic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 2-chloro stearic acid in these solvents is approximately 20, 10, and 30 mg/ml, respectively.

### Description

2-chloro Stearic acid is a bioactive fatty acid that accumulates in primary human monocytes and neutrophils as well as murine neutrophils stimulated with phorbol 12-myristate 13-acetate (PMA; Item No. 10008014).<sup>1,2</sup> It induces DNA release from primary human neutrophils.<sup>2</sup>

### References

1. Wang, W.Y., Albert, C.J., and Ford, D.A.  $\alpha$ -Chlorofatty acid accumulates in activated monocytes and causes apoptosis through reactive oxygen species production and endoplasmic reticulum stress. *Arterioscler. Thromb. Vasc. Biol.* **34**(3), 526-532 (2014).
2. Palladino, E.N.D., Katunga, L.A., Kolar, G.R., et al. 2-Chlorofatty acids: Lipid mediators of neutrophil extracellular trap formation. *J. Lipid. Res.* **59**(8), 1424-1432 (2018).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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