

# PRODUCT INFORMATION



## 1,2,3-Trieicosapentaenoyl Glycerol

Item No. 10009732

CAS Registry No.: 99660-94-3

Formal Name: (5Z,5'Z,5''Z,8Z,8'Z,8''Z,11Z,11'Z,11''Z,14Z,14'Z,14''Z,17Z,17'Z,17''Z)-5,8,11,14,17-eicosapentaenoic acid, 1,2,3-propanetriyl ester

Synonyms: EPA-TG, Glycerol Trieicosapentaenoate, TG(20:5/20:5/20:5)

MF: C<sub>63</sub>H<sub>92</sub>O<sub>6</sub>

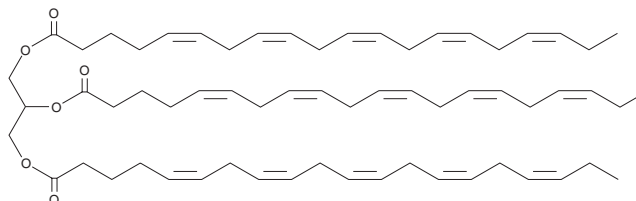
FW: 945.4

Purity: ≥98%

Supplied as: A solution in ethanol

Storage: -20°C

Stability: ≥2 years



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

### Laboratory Procedures

1,2,3-Trieicosapentaenoyl glycerol (EPA-TG) 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. The solvent dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of EPA-TG in DMF is approximately 10 mg/ml.

EPA-TG is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of EPA-TG should be diluted with the aqueous buffer of choice. EPA-TG has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method.

### Description

EPA-TG is a glycerol ester of eicosapentaenoic acid (Item Nos. 90110 | 21908), which is an ω-3 fatty acid. An EPA-TG emulsion, administered i.v., lowers leukotriene B<sub>4</sub> production by 40% in polymorphonuclear leukocytes from rabbits and reduces platelet aggregation.<sup>1,2</sup> It suppresses natural killer cell activity both *in vitro* and *in vivo*, in human lymphocytes and murine spleens, respectively, with the *in vivo* effects lasting up to seven days.<sup>3,4</sup>

### References

1. Hamazaki, T. Intravenous infusion of n-3 polyunsaturated fatty acids. *Proc. Soc. Exp. Biol. Med.* **200(2)**, 171-173 (1992).
2. Urakaze, M., Hamazaki, T., Soda, Y., et al. Infusion of emulsified trieicosapentaenoyl-glycerol into rabbits--the effects on platelet aggregation, polymorphonuclear leukocyte adhesion, and fatty acid composition in plasma and platelet phospholipids. *Thromb. Res.* **44(5)**, 673-682 (1986).
3. Yamashita, N., Yokoyama, A., Hamazaki, T., et al. Inhibition of natural killer cell activity of human lymphocytes by eicosapentaenoic acid. *Biochem. Biophys. Res. Commun.* **138(3)**, 1058-1068 (1986).
4. Yamashita, N., Sugiyama, E., Hamazaki, T., et al. Inhibition of natural killer cell activity by eicosapentaenoic acid in vivo and in vitro. *Biochem. Biophys. Res. Commun.* **150(1)**, 497-505 (1988).

#### 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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