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ProductInformation

Boron trifluoride methanol solution

Product N umber **B 1252** Storage Temperature 2-8 °C

Product Description

CAS Number: 373-57-9

The principle use of Boron Trifluoride in methanolic solutions is to derivatize fatty acids.^{1,2} This material is prepared using ACS grade methanol. It is a 14% (w/w) solution.

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Procedure

The method of fatty acid derivitization used by Sigma is as follows:

- 1. Weigh 15 to 20 mg of fatty acid into an ampule.
- 2. Add 1 ml of the 14% (w/w) solution of Boron Trifluoride in Methanol.
- 3. Flame-seal the ampule.

- 4. Place the ampule in a "hot-block" at 100 °C for 7 minutes.
- 5. Allow the ampule to cool to room temperature.
- 6. Carefully break open the ampule and add 1 ml of n-hexane.
- 7. Add deionized water to fill the ampule.
- 8. Cover the top of the ampule and carefully invert it several times to extract the product into the top (organic) layer.
- 9. Remove the sample for analysis.

Note: Exercise great caution while flame sealing and heating the ampule by working behind a shield.

References

- Hamilton, R. J., and Hamilton, S., Lipid Analysis: A Practical Approach, Oxford, IRL Press. (Oxford, England, 1992), p. 47.
- 2. Anal. Chem., **33**, 363, (1961).

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