BDG SYNTHESIS

Certificate of Analysis

BDG Synthesis certifies that this reference material meets or exceeds the specifications stated herein.

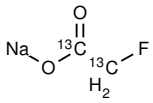
Neil Beare

Neil Beare, PhD, Director
16 December 2014

Name: **Sodium Fluoroacetate-$^{13}C_2$**

CAS Number: 62-74-8 (unlabelled)

Structure:



Molecular Weight: $^{13}C_2H_2FNaO_2$ = 102.01

Lot Number: BDG 1168

Appearance: White, crystalline solid

Chemical Purity: 40-50 %

Storage and Handling:

Temperature:	refrigerate for prolonged storage; may be handled and shipped at ambient temperature.
Humidity:	not believed to be hygroscopic; may be handled in normal laboratory atmosphere.
Light:	protect from strong sunlight.
Caution:	This compound is provided in impure form for investigational purposes, it should only be used as an internal standard by experienced personnel who understand that impurities are present, and who also understand the high toxicity of this material.

Version 1 *(Id720)*

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Identity and Purity

Proton NMR Spectrum

Identity: the signals are consistent with the proposed structure and in accord with literature where available.
Isotopic Purity: analysis of the NMR spectra of an intermediate in the synthesis indicates a ^{12}C content of about 1% at each carbon.
Impurities: a significant quantity of sodium bromoacetate-$^{13}C_2$ and other minor impurities are observed.

Carbon-13 NMR Spectrum

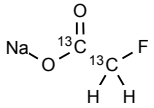
Identity: the signals are consistent with the proposed structure and in accord with literature where available.
Impurities: a significant quantity of sodium bromoacetate-$^{13}C_2$ is observed.

The available quantity of custom-synthesised material is always small, and this limits the extent and type of analytical data which can be obtained. This Certificate is presented in descriptive format for use by analytical chemists who are trained in the use of custom-synthesised materials. Custom materials often contain higher levels of residual solvents and/or water, and we urge you to use the corrected purity where needed rather than the raw HPLC purity. This compound is intended for use as an analytical reference material and it is not for human administration. Structures are shown with relative stereochemistry unless otherwise specified.

The re-test date is assigned from experience gained with the material in the laboratory and/or on storage. It is not possible to perform formal storage studies because of the small amount of material available.

BDG SYNTHESIS

Proton NMR Spectrum of Sodium Fluoroacetate-$^{13}C_2$ in D_2O



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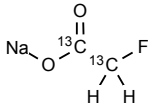
BDG SYNTHESIS

Carbon-13 NMR Spectrum of Sodium Fluoroacetate-$^{13}C_2$ in D_2O



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