

CERTIFICATE OF ANALYSIS

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1. Identification

Catalogue D431828

2,2-Dichloroacetic Acid-1-13C

Product: Structure: CAS Number: Synonym:

Molecular Formula:

173470-70-7

C13CH2Cl2O2

Molecular weight:

129.93

Source of Product:

Synthetic

Solubility:

Chloroform (Slightly), Ethyl Acetate (Slightly), Methanol

(Slightly)

Lot Number: 7-SKR-90-5

Shipping This Product Is Stable To Be Shipped

Condition: With Blue Ice

Purity: 98%

Storage Condition: -20°C

2. Warning

Warning 1: Warning 2: Warning 3:

3. Analytical Information

Tests: Specifications: Results:

Appearance Colourless to Yellow Oil Clear Colourless to Pale Yellow Oil

NMR Conforms to Structure Conforms
C NMR Conforms to Structure Conforms

Elemental Analysis Conforms %C: 18.50, %H: 1.78

MS Conforms to Structure Conforms
Isotopic Purity >95% 99.7%

HPLC Purity Report Result 99.78% (RID)

Additional Information: Normalized Intensity: 13C0 = 0.30%, 13C1 = 99.70%

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of \pm 2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By Reviewed By C of A Approved Test Date Retest Date

Henry Tieu Toni Rantanen Chanell Chu 4/27/2023 4/25/2027

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