



CERTIFICATE OF ANALYSIS

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1. Identification

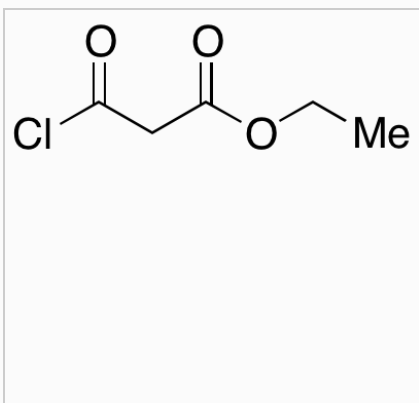
Catalogue Number: E922050

CAS Number: 36239-09-5

Synonym: (Chlorocarbonyl)acetic Acid Ethyl Ester; (Chloroformyl)acetic Acid Ethyl Ester; (Ethoxycarbonyl)acetyl Chloride; 2-(Ethoxycarbonyl)acetyl Chloride; 3-Chloro-3-oxopropanoic Acid Ethyl Ester; 3-Ethoxy-3-oxopropanoyl Chloride; Carbethoxyacetyl Chloride; Carboethoxyacetyl Chloride; Ethoxymalonyl Chloride; Ethyl (Chlorocarbonyl)acetate; Ethyl (Chloroformyl)acetate; Ethyl 3-Chloro-3-oxopropanoate; Ethyl 3-Chloro-3-oxopropionate; Ethyl 3-Oxo-3-chloropropanoate; Ethyl Malono

Product: Ethyl Malonyl Chloride

Structure:



Molecular Formula:

C₅H₇ClO₃

Molecular weight:

150.56

Source of Product:

N/A

Solubility:

Chloroform (Soluble), DMSO (Sparingly), Ethyl Acetate (Slightly)

Lot Number: 2022-ANF-009

Purity: 95%

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: 4°C, Hygroscopic

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Colourless to Dark Brown Oil	Clear Colourless to Pale Yellow Oil
NMR	Conforms to Structure	Conforms
C NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 39.12, %H: 4.82

Additional Information: N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 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 By	Test Date	Retest Date
Henry Tieu	Toni Rantanen	Chanell Chu	11/30/2022	11/28/2026
				