



CERTIFICATE OF ANALYSIS

20 Martin Ross Avenue, North York, ON, M3J 2K8, CANADA
Tel: (416) 665-9696, Fax: (416) 665-4439
Email: orders.trc@lgcgroup.com Website: www.trc-canada.com

1. Identification

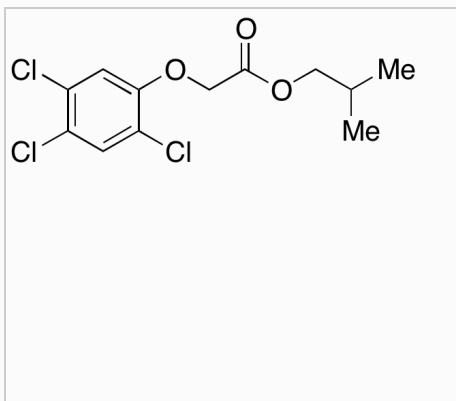
Catalogue Number: T774445

CAS Number: 4938-72-1

Product: 2,4,5-Trichlorophenoxyacetic Acid Isobutyl Ester

Synonym: (2,4,5-Trichlorophenoxy)acetic Acid 2-Methylpropyl Ester;

Structure:



Molecular Formula:

C₁₂H₁₃Cl₃O₃

Molecular weight:

311.59

Source of Product:

Synthetic

Solubility:

Acetone (Slightly), Chloroform (Sparingly), Methanol (Slightly)

Lot Number: 3-LIJ-139-1

Purity: 98%

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

Storage Condition: -20°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

| Tests: | Specifications: | Results: |
|--------------------|---------------------------------|------------------------|
| Appearance | White to Light Brown Waxy Solid | Light Brown Waxy Solid |
| NMR | Conforms to Structure | Conforms |
| Elemental Analysis | Conforms | %C: 46.33, %H: 4.26 |
| HPLC Purity | Report Result | 99.23% (205 nm) |
| MS | Conforms to Structure | Conforms |

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 $\pm 2\%$. 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 By | Test Date | Retest Date |
|-------------|---------------|--------------------|-----------|-------------|
| Evan Burns | Toni Rantanen | Chanell Chu | 3/21/2022 | 3/19/2026 |
| | | | | |