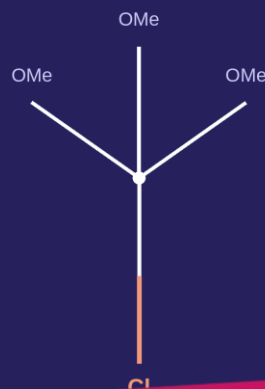


2-Chloro-1,1,1-Trimethoxyethane



PRODUCT IN FOCUS



2-Chloro-1,1,1- trimethoxyethane

INTRODUCTION

2-Chloro-1,1,1-trimethoxyethane is an organochlorine orthoester compound commonly used as a versatile synthetic intermediate in organic and pharmaceutical chemistry. It is a colorless to pale yellow liquid with good reactivity toward nucleophilic substitution and cyclization reactions, making it valuable in the preparation of heterocyclic and bioactive molecules.

MANUFACTURE

2-Chloro-1,1,1-trimethoxyethane is typically manufactured through the reaction of chloroacetaldehyde derivatives or chlorinated acetals with methanol under acidic catalytic conditions, resulting in the formation of the corresponding trimethoxy orthoester. The process is conducted under controlled temperature and moisture-free conditions to maximize product purity and minimize hydrolysis of the orthoester functionality.

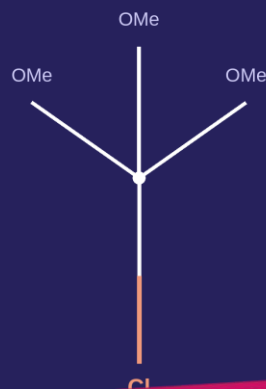
APPLICATIONS

Chemical intermediate in the synthesis of:

- ✖ Intermediate for the synthesis of pharmaceutical compounds and drug candidates.
- ✖ Preparation of heterocyclic compounds such as oxadiazoles and quinazolinones.
- ✖ Used in synthesis of Agrochemicals.
- ✖ Specialty chemical synthesis.
- ✖ Chloromethylating building block in organic synthesis.
- ✖ Research and development involving fine chemicals and advanced intermediates

Synonyms	1,1,1-Trimethoxy-2-chloroethane, 2-chloro-1,1,1-trimethoxyethane
CAS no.	74974-54-2
EINECS no.	629-378-0
Molecular formula	C ₅ H ₁₁ ClO ₃
Molecular weight	154.59 g/mol
Structure	

2-Chloro-1,1,1-Trimethoxyethane



PRODUCT IN FOCUS



SPECIFICATIONS

Test	Unit	Specification
Appearance	-	Colorless to yellow liquid
Identification by IR	-	Conforms to structure
Water Content by KF	(%w/v)	NMT 0.5
Purity by GC	%	NMT 97
Deschloro Impurity	%	NMT 0.5
Any Unspecified Impurities	%	NMT 1.0
Total Impurities	%	NMT 3.0

PACKING

Compliant with international regulations

STORAGE

Store the product in tightly sealed containers in a cool, dry, and well-ventilated area away from heat, sparks, open flames, and moisture. Recommended storage temperatures are typically 2–8°C or refrigerated conditions. Containers should be protected from direct sunlight and exposure to water, as orthoesters may hydrolyze in the presence of moisture.

REACH status

Not registered

ExSyn offers 2-Chloro-1,1,1-trimethoxyethane on commercial scales and welcomes enquiries. Our exceptional quality and service will make ExSyn your supplier of choice! If you need additional information or SDS, please contact us.