



Trifluoroacetic Acid

PRODUCT IN FOCUS



Trifluoroacetic Acid

INTRODUCTION

Trifluoroacetic acid (TFA) is widely used in organic synthesis as a solvent, catalyst, and reagent, owing to its reactivity and stability under adverse conditions. It is considered as one of the most economical fluorinated building blocks. It is widely used in peptide synthesis and other organic transformations involving deprotection of t-BOC group

Manufacture

Trifluoroacetic acid is commonly produced in Simon electro-fluorination process involving hydrogen fluoride and acetic acid.

Applications

APIs

- Isoflurane, a general anesthetic
- Polythiazide, a diuretic

Intermediates

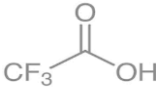
- Trifluoroacetic anhydride
- Trifluoroacetic acid alkyl esters
- 2,2,2-Trifluoroethanol
- Peroxytrifluoroacetic acid
- 2-(2,2,2-Trifluoroacetylamino)pyridine
- N[1-(6-Chloro-3-pyridinyl)methyl]-2(1H)-pyridinylidene]-2,2,2, trifluoroacetamide
- Methyl 2-Fluoroacrylate
- ϵ -caprolactam

Agrochemicals

- Thiazufluron, a herbicide

Others

- Introduction of CF₃ group in organic molecules thereby creating CF₃ building blocks
- Olefin hydration to produce alcohols
- Deprotection of amino group in peptide synthesis

Synonyms	Trifluoroethanoic acid Perfluoroacetic acid
CAS no.	76-05-1
EINECS no.	200-929-3
Molecular formula	C ₂ HF ₃ O ₂
Molecular weight	114.02
Structure	



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SPECIFICATION

Test	Unit	Specification
Appearance	-	Clear colourless liquid
Purity by titrimetry	% w/w	Min 99.90
Moisture	% w/w	Max 0.05
Fluoride	% w/w	Max 0.005
Chloride	% w/w	Max 0.001
Sulphate	% w/w	Max 0.001
Identification by IC	-	The retention time of TFA peak matches with to that of standard TFA

STORAGE

Product is stored at ambient temperature.

PACKING

35 kg / 250 kg UN-approved MS-HDPE drum

REACH STATUS

Registered

ExSyn offers TFA on commercial scale, from a REACH-registered source, and welcomes enquiries. No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice ! If you need any additional information or SDS, please get in touch with us.