

PRODUCT IN FOCUS



N,N-Dimethylthiocarbamoyl Chloride

INTRODUCTION

Dimethylthiocarbamoyl Chloride is an organosulfur compound, a yellow solid. It is often encountered as a yellow syrup. It is a key reagent in the synthesis of arylthiols via the Newman-Kwart rearrangement.

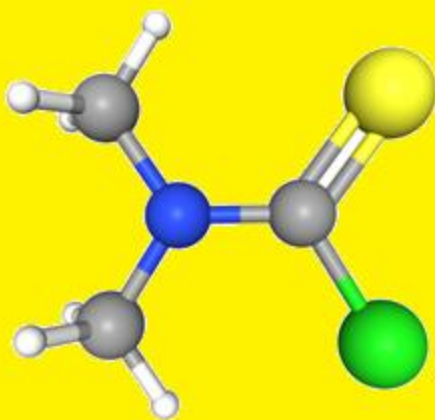
Manufacture

Dimethylthiocarbamoyl Chloride is prepared by chlorination of the related tetramethylthiuram disulfide: $[\text{Me}_2\text{NC}(\text{S})]_2\text{S}_2 + 3 \text{Cl}_2 \rightarrow 2 \text{Me}_2\text{NC}(\text{S})\text{Cl} + 2 \text{SCL}$. With methanethiolate, it gives methyl dimethyldithiocarbamate ($\text{Me}_2\text{NC}(\text{S})\text{SMe}$).

Applications

- ⚠ Dimethylthiocarbamoyl chloride is used as an intermediate in the synthesis of pharmaceuticals.
- ⚠ It finds application in chemoselective deoxygenation of pyridine-N-oxides.
- ⚠ It is also used as a starting reagent in the synthesis of dimethylthiocarbamates.

Synonyms	Dimethylthiocarbamoyl Chloride N,N-Dimethylcarbamothioic Chloride
CAS no.	16420-13-6
EINECS no.	240-468-5
Molecular formula	$\text{C}_3\text{H}_6\text{ClNS}$
Molecular weight	123.60
Structure	



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SPECIFICATIONS

Test	Unit	Specification
Appearance	-	Yellow coloured solid
Purity	%	Min 98.0
Melting Point	°C	40.5 - 43.5
Impurities		
- Di Methyl Carbamoyl Chloride (DMCC)	%	Max 1.50
- Other impurities	%	Max 0.50

STORAGE

Store in cool place. Moisture sensitive.

PACKING

20 kg UN approved HDPE drum.

REACH status

Not registered yet.

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 contact us.