

2-CYCLOHEXENE -1-ONE

PRODUCT IN FOCUS



2-Cyclohexene-1-one

INTRODUCTION

2-Cyclohexene-1-one is an organic intermediate used in synthesis of pharmaceuticals, agrochemicals, and fragrances. It is a ketone, or more precisely, an enone. It undergoes nucleophilic conjugate addition with organocopper reagents, Michael reactions and Robinson annulations.

Manufacture

The product is commercially manufactured by Birch reduction of phenol or anisole, alternatively by catalytic oxidation of cyclohexene.

Applications in Pharma

Cyclohexenone is a key raw material in the production of:

- Carprofen, a nonsteroidal anti-inflammatory drug

Applications in Agrochemicals

It is also used to synthesize the herbicides:

- Clethodim
- Tralkoxydim

Applications in Intermediates

Following intermediates can be synthesized from cyclohexenone:

- 3-Methylcyclohexanone
- 2-(Hydroxymethyl)cyclohex-2-en-1-one

Other Applications

- As fragrance ingredient with roasted savory green odor
- In biological studies for H-tunneling in multiple hydride transfers of catalytic cycle of the enzyme - morphinone reductase

Synonyms

Cyclohexenone
Cyclohex-2-enone

CAS no.

930-68-7

EINECS no.

212-223-5

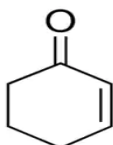
Molecular formula

C₆H₈O

Molecular weight

96.13

Structure



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SPECIFICATIONS

Test	Unit	Specification
Appearance	-	Clear, colorless or slightly yellowish liquid
Identification by GC	-	Peak in the sample chromatogram to match with that in standard chromatogram
Water by KF	w/v	Max 0.5
Density at 20°C	-	0.987 - 0.997
Purity by GC	%	Min 98.0

STORAGE

The product is stored at ambient temperature.

PACKING

25 kg UN-approved carboy.

REACH Status

Not registered yet.

ExSyn offers 2-cyclohexene-1-one on commercial scales 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 contact us.