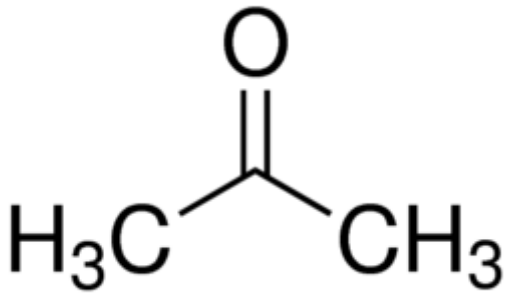
Specification Sheet

179124 Sigma-Aldrich

Acetone

ACS reagent, ≥99.5%

- **CAS Number** 67-64-1
- **Linear Formula** CH_3COCH_3
- **Molecular Weight** 58.08
- **Beilstein/REAXYS Number** 635680
- **EC Number** 200-662-2
- **MDL number** MFCD00008765
- **eCl@ss** 39021201
- **PubChem Substance ID** 329751579
- **NACRES** NA.02



SKU-Pack Size	Availability	Pack Size	Price (SGD)	Quantity
179124-500ML	Available to ship on 14.04.2021 - FROM	500 mL	46.14	0
179124-1L	Estimated to ship on 25.05.2021 - FROM	1 L	61.94	0
179124-2.5L	Available to ship on 14.04.2021 - FROM	2.5 L	108.08	0
179124-20L	Estimated to ship on 09.06.2021 - FROM	20 L	472.27	0

Properties

Related Categories	ACS Grade, ACS Grade Solvents, ACS and Reagent Grade Solvents, Acetone, Amber Glass Bottles,
Quality Level	200
grade	**ACS reagent**
vapor density	**2 (vs air)**
vapor pressure	**184 mmHg (20 °C)**
assay	**≥99.5%**
form	**liquid (clear)**
shelf life	**Recommended retest period - 2 years**
expl. lim.	**13.2 %**
application(s)	**UV/Vis spectroscopy: suitable**
impurities	**≤0.0003 meq/g Titr. acid**
	≤0.0006 meq/g Titr. base
	≤0.002% aldehyde as formaldehyde
	≤0.05% isopropanol
	≤0.05% methanol
	≤0.5% water
evapn. residue	**≤0.001%**

color	**APHA: ≤10**
refractive index	***n*20/D 1.359 (lit.)**
pH	**5-6 (20 °C, 395 g/L)**
bp	**56 °C/760 mmHg (lit.)**
mp	**−94 °C (lit.)**
density	**0.791 g/mL at 25 °C (lit.)**
storage temp.	**room temp**
SMILES string	**CC(C)=O**
InChI	**1S/C3H6O/c1-3(2)4/h1-2H3**
InChI key	**CSCPPACGZOOCGX-UHFFFAOYSA-N**

Show Fewer Properties

Description

General description

Acetone is a polar organic solvent. It can undergo photocatalytic oxidation in the presence of mixed TiO_2-rare earth oxides.[1]

Application

Acetone may be used in the synthesis of Ga (Gallium)-DOTATATE (where DOTA= 1,4,7,10-tetraazacyclo- dodecane - 1,4,7,10-tetraacetic acid) chemicals.6 It may be used in an assay for the determination of ester groups in lipids by spectrophotometric methods.[4]

Acetone undergoes aldolization in the presence of Mg-Al layered double hydroxides (LDH) as catalysts and Cl- and/or CO_3^{2-} as compensating anions to afford diacetone alcohol and mesityl oxide as the main products.[2] Its enantioselective Aldol condensation with various isatins in the presence of a dipeptide catalyst forms 1-alkyl 3-(2-oxopropyl)-3-hydroxyindolin-2-ones.[3] Aqueous solution of acetone may be used as a medium for the oxidation of alkynes to 1,2-diketones using potassium permanganate.[5]

Acetone′s luminesence intensity is dependent upon the solution components . The absorption of UV light by acetone, results in its photolysis and the production of radials .

Packaging

1, 6×1, 2.5, 4×2.5, 4, 4×4 L in glass bottle

18, 20 L in steel drum

200 L in Pure-Pac™ 1

4×4 L in poly bottle

View returnable container options.

200 L in steel drum

500, 6×500 mL in glass bottle

Other Notes

Go to our BioRenewable Alternative Acetone - 904082

For information on acetone miscibility, please visit the following link:

Acetone Miscibility/Immiscibility Table

Pure-Pac® II containers require the Micromatic MacroValve coupler for dispensing solvents, Z560723.

Legal Information

Pure-Pac is a registered trademark of Sigma-Aldrich Co. LLC