

Product Name:	Acetone USP-NF		
Grade:	USP-NF	CASR No.:	[67-64-1]
Specification No.:	100.S.NF	Molecular formula:	C ₃ H ₆ O
Rev.No.	00	Molecular wt.:	58.08
Product Code	100	Effective date:	----

Physical Property:

Description: Transparent, colorless, mobile, volatile liquid, having a characteristic odor. A solution (1 in 2) is neutral to litmus.

Solubility: Miscible with water, with alcohol, with ether, with chloroform, and with most volatile oils.

Tests:

Sr. No.	Tests	Specification	Reference
1.	Identification A (By IR)	The IR spectrum of substance should concomitant with corresponding reference or working standard.	USP-NF
2.	Identification B (By GC)	The RT of the sample corresponds to that of Acetone reference/working standard, as obtained in the Assay.	USP-NF
3.	Assay	NLT 99.0% of C ₃ H ₆ O, calculated on the anhydrous basis.	USP-NF
4.	Specific gravity at 25°C	NMT 0.789	USP-NF
5.	Non-volatile residue	The weight of the residue does not exceed 2mg (0.004% max.)	USP-NF
6.	Water	0.5% max	USP-NF
7.	Readily oxidizable substances	The permanganate color of the mixture does not completely disappear within 15 min.	USP-NF

Packaging and storage: Preserve in tight containers, remote from fire.

Revision History:

Sr. No.	Revision No.	Remarks /CC No.
1.	00	New specification, USP-NF.

	Name	Designation	Date
Prepared By			
Reviewed By			
Approved By			

Product Name:	Acetone Ph.Eur		
Grade:	Ph.Eur (European pharmacopoeia)	CASR No.:	[67-64-1]
Specification No.:	100.S.EP	Molecular formula:	C ₃ H ₆ O
Rev.No.	00	Molecular wt.:	58.08
Product Code	100	Effective date:	-----

Physical Property:

Appearance: Volatile, clear, colourless liquid.

Solubility: Miscible with water and with ethanol (96%).

Tests:

Sr. No.	Tests	Specification	Reference
1.	Identification A	Test of relative density should comply.	Ph.Eur
2.	Identification B	An intense red colour is produced with sodium nitroprusside, become violet with acetic acid.	Ph.Eur
3.	Identification C	A greenish-blue colour is produced with nitrobenzaldehyde by chemical test.	Ph.Eur
4.	Appearance of solution	The solution is clear and colourless.	Ph.Eur
5.	Acidity or alkalinity	To 5ml, add 5ml water, phenolphthalein indicator and 0.5ml of 0.01M NaOH. The solution in pink. Add 0.7ml of 0.01M HCL and methyl red indicator. The solution is red or orange.	Ph.Eur
6.	Relative density at 20°C	0.790 to 0.793	Ph.Eur
7.	Reducing substances	The mixture is not completely decolourised by chemical test.	Ph.Eur
8.	Related substances		Ph.Eur
	8.1 Impurity A (Methanol)	0.05% v/v	
	8.2 Impurity B (Isopropanol)	0.05% v/v	
	8.3 Impurity C (Benzene)	2ppm v/v	
	8.4 Any other impurity	0.05% v/v	
9.	Matter insoluble in water	The solution is clear.	Ph.Eur
10.	Residue on evaporation	50ppm max.	Ph.Eur
11.	Water	3 g/L max	Ph.Eur

Storage: Protected from light.

	Name	Designation	Date
Prepared By			
Reviewed By			
Approved By			

Product Name:	Acetone Ph.Eur		
Grade:	Ph.Eur (European pharmacopoeia)	CASR No.:	[67-64-1]
Specification No.:	100.S.EP	Molecular formula:	C ₃ H ₆ O
Rev.No.	00	Molecular wt.:	58.08
Product Code	100	Effective date:	-----

Revision History:

Sr. No.	Revision No.	Remarks /CC No.
1.	00	New specification, Ph.Eur.

	Name	Designation	Date
Prepared By			
Reviewed By			
Approved By			

Product Name:	Acetone BP		
Grade:	BP (British pharmacopoeia)	CASR No.:	[67-64-1]
Specification No.:	100.S.BP	Molecular formula:	C ₃ H ₆ O
Rev.No.	00	Molecular wt.:	58.08
Product Code	100	Effective date:	-----

Physical Property:

Appearance: Volatile, clear, colourless liquid.

Solubility: Miscible with water and with ethanol (96%).

Tests:

Sr. No.	Tests	Specification	Reference
1.	Identification A	Test of relative density should comply.	BP
2.	Identification B	An intense red colour is produced with sodium nitroprusside, become violet with acetic acid.	BP
3.	Identification C	A greenish-blue colour is produced with nitrobenzaldehyde by chemical test.	BP
4.	Appearance of solution	The solution is clear and colourless.	BP
5.	Acidity or alkalinity	To 5ml, add 5ml water, phenolphthalein indicator and 0.5ml of 0.01M NaOH. The solution in pink. Add 0.7ml of 0.01M HCL and methyl red indicator. The solution is red or orange.	BP
6.	Relative density at 20°C	0.790 to 0.793	BP
7.	Reducing substances	The mixture is not completely decolourised by chemical test.	BP
8.	Related substances		BP
	8.1 Impurity A (Methanol)	0.05% v/v	
	8.2 Impurity B (Isopropanol)	0.05% v/v	
	8.3 Impurity C (Benzene)	2ppm v/v	
	8.4 Any other impurity	0.05% v/v	
9.	Matter insoluble in water	The solution is clear.	BP
10.	Residue on evaporation	50ppm max.	BP
11.	Water	3 g/L max	BP

Storage: Protected from light.

	Name	Designation	Date
Prepared By			
Reviewed By			
Approved By			

Product Name:	Acetone BP		
Grade:	BP (British pharmacopoeia)	CASR No.:	[67-64-1]
Specification No.:	100.S.BP	Molecular formula:	C ₃ H ₆ O
Rev.No.	00	Molecular wt.:	58.08
Product Code	100	Effective date:	-----

Revision History:

Sr. No.	Revision No.	Remarks /CC No.
1.	00	New specification.

	Name	Designation	Date
Prepared By			
Reviewed By			
Approved By			