Acetone – ACS Grade

Physical and Chemical Properties	
CAS Number	67-64-1
Chemical Formula	CH_3COCH_3
Other/Generic Names	Dimethylketone; 2-propanone; dimethylketal
Appearance	Clear water white liquid
Physical State	Liquid
Molecular Weight	58.08
Odor	Sweetish
Density at 20°C, 68°F	6.63 lb/US gal
Dielectric Constant 25°C	21.45
Specific Gravity (25°C/25°F)	Not over 0.7880
Vapor Density (Air = 1.0)	2
Vapor Pressure at 20°C, 68°F	181.7 mmHg (3.51 psi)
Viscosity at 15°C, 59°F	0.3371 cP
Water Solubility (miscibility)	Soluble in all proportions in water
Threshold Limit (toxicity)	1000 ppm
Explosive Limits (by volume in air)	Lower: 2.6%, Upper: 12.8%
Flash Point Closed cup	-17.8°C (0°F)
Flash Point Open cup	-9°C (15.8°F)
Autoignition Temperature	560 °C (1040°F)
Boiling Point (760 mm)	56.1 °C (133°F)
Melting Point (freezing point)	-93.9°C (-137°F)
Coefficient of cubical expansion	0.0015 at 55°C, per °C
Color	Colorless

Product Specifications		
Property	**Specification**	**Test Method**
Appearance	Clear water white liquid	Visual
Color, APHA	10 Max	D1209
Specific Gravity 25°C/25°C	0.7860 - 0.7890	D4052
Specific Gravity 20°C/20°C	0.7910 - 0.7930	D4052
Purity, Wt. %	99.5 Min	GC
Water, Wt.%	0.5 Max	D1364
Titrable acid, meq/g	0.0003 Max	D1613
Titrable base, meq/g	0.0006 Max	D1614
Nonvolatile Matter, ppm	10 Max	D1353
Aldehyde, (as HCHO), Wt.%	0.002%	GC
I-Propanol, Wt.%	0.05%	GC
Methanol, Wt.%	0.05%	GC
Residue after evaporation	0.001%	
Water Solubility	Miscible, distilled water	D1722
Reducing Substances (Permanganate Time Test)	Color retains 120 min	D1363