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Technical Data Sheet

ACETONE

Version: 1.1 **Printdate:** 17.08.2020

IDENTIFIERS

Product name	ACETONE
Chemical name of the substance:	Propan-2-one
CAS:	67-64-1
EC-No.:	606-001-00-8
REACH Registration Number:	01-2119471330-49-XXXX
Chemical Sum Formula	C_3H_6O
Chemical Formula	CH_3COCH_3

TYPICAL PHYSICAL PROPERTIES

This data provided for those properties are typical values, and should not be construed as sales specifications.

Property	Unit	Method	Value
Purity, min.	%m/m	GC	99.5
Water	%m/m	ASTM D1364	0.2
Acidity (as Acetic Acid)	%m/m	ASTM D1613	0.001
Density at 20°C	kg/l	ASTM D4052	0.791
Specific Gravity at 20°C/20°C	-	ASTM D4052	0.792
Specific Gravity at 25°C/25°C	-	ASTM D4052	0.788
Coefficient of Cubic Expansion at 20°C	10^{-4}/°C	Calculated	14
Refractive Index at 20°C	-	ASTM D1218	1.359
Color	Pt-Co	ASTM D1209	<5
Boiling Point	°C	-	56
Relative Evaporation Rate (nBuAc=1) Relative	-	ASTM D3539	5.6
Relative Evaporation Rate (Ether=1)	-	DIN 53170	2.0
Antoine Constant A #	kPa. °C	-	6.25478
Antoine Constant B #	kPa. °C	-	1216.69
Antoine Constant C #	kPa. °C	-	230.275
Temperature Limits for Antoine Equation #	°C -		
Vapor Pressure at 20°C	kPa	Calculated	
Vapor Pressure at 50°C	kPa	Calculated	
Saturated Vapor Concentration at 20°C	g/m3	Calculated	
Volatile Organic Compound (VOC)	g/l	EU / EPA	
Flash Point (Abel)	°C	IP 170	
Auto Ignition Temperature	°C	ASTM E659	
Lower Explosion Limit	%v/v -	-	
Upper Explosion Limit	%v/v -	-	
Electrical Conductivity at 20°C	pS/m	ASTM D4308	
Dielectric Constant at 20°C	-	-	
Freezing Point	°C	-	-95

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Property	Unit	Method	Value
Surface Tension at 20°C	mN/m	-	24
Viscosity at 20°C	mPa.s	-	0.32
Hildebrand Solubility Parameter	(cal/cm3)1/2	-	10.0
Hydrogen Bonding Index	-	-	12.5
Fractional Polarity	-	-	0.695
Heat of Vaporization at Tboil	kJ/kg	-	525
Heat of Combustion (Net) at 25°C	kJ/kg	-	29000
Specific Heat at 20°C	kJ/kg/°C	-	2.16
Thermal Conductivity at 20°C	W/m/°C	-	0.16
Miscibility at 20°C: Solvent in water	%m/m	-	complete
Miscibility at 20°C: Water in solvent	%m/m	-	complete
Azeotrope with Water: Boiling Point	°C	-	non-azeotropic
Azeotrope with Water: Solvent Content	%m/m	-	non-azeotropic
Molecular Weight	g/mol	-	58

HAZARD INFORMATION

For detailed Hazard Information please refer to the Safety Data Sheet on resources.3d-basics.com

STORAGE HANDLING

Provided proper storage and handling precautions are taken we would expect ACETONE to be technically stable for at least 12 months. For detailed advice on Storage and Handling please refer to the Safety Data Sheet on resources.3d-basics.com.

DISCLAIMER