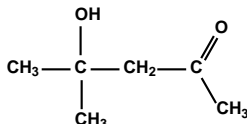


# DIACETONE ALCOHOL

- Acronym : DAA
- Synonym : 4-Hydroxy-4-methylpentan-2-one
- CAS number : 123-42-2
- EC number : 204-626-7
- REACH registration number : 01-2119473975-21-0000

## MAIN PROPERTIES

	Values	Arkema methods	Norms references
Composition	$\text{C}_6\text{H}_{12}\text{O}_2 :$ 		
Appearance at 20°C	Clear liquid free from suspended materials	LCR 1116	ASTM D 4176
Color (Pt-Co)	≤ 25	LCR 1002	ASTM D 1209
Purity (% by weight)	≥ 99.5	LCR 2189	GC
Water Content (% by weight)	≤ 0.10	LCR 1007	ASTM D 1364
Acidity as acetic acid (% by weight)	≤ 0.01	LCR 1004	ASTM D 1613
Density at 20°C (g/cm <sup>3</sup> )	0.937 - 0.940	LCR 1062	ASTM D 4052
Distillation range (°C)	160.0 - 172.0 (*)	LCR 1123	ASTM D 1078

The above commercial specifications are guaranteed ; they were established using the test methods which were in force at the plant at the time of despatch of the product, and are in accordance with any applicable revision references. . (\*) guaranteed values not reported on analysis certificates.

## MAIN APPLICATIONS

- **Waterborne coating, coil coating and wood coating** : DAA is commonly used as a solvent, co-solvent or coalescing agent in these different coatings.
  - **Organic peroxides** : DAA is used as a solvent for organic peroxides used in the polymerisation of unsaturated polyester resins.
  - **Chemicals synthesis** : Solvent for chemical synthesis and cleaning industrial installations (agrochemicals, pigment dyes....)
  - **Others** : Pesticides formulations. Cleaning and dewaxing agent for metal, rubber rolls, glass fiber reinforced plastics.
- For further informations, please contact our technical services.

# DIACETONE ALCOHOL

## PACKAGING

Diacetone alcohol is supplied in bulk by road tankers, isocontainers, IBC of net weight 880 kg, and in drums of net weight 195 kg .

## STORAGE / SAFETY / PRECAUTIONS DURING USE / HANDLING

Please refer to the safety data sheet before any use. Typical shelf life at 25°C is 12 months with a possible color evolution.

## PHYSICAL DATA

Molecular weight.....	116.16
Boiling point at 1013 hPa .....	168 °C
Vapor pressure at 20°C .....	1.12 hPa
Relative evaporation rate (n-butyl acetate = 1) .....	0.1
Freezing point .....	- 44 °C
Viscosity at 20°C .....	3.2 mPa.s
Surface tension at 20°C .....	31 mN/m
Refractive index at 20 °C.....	1.4237
Latent heat of vaporization .....	384 kJ/kg
Specific heat (liquid at 20°C) .....	1.9 kJ/kg/K
Heat of combustion at 25°C.....	27710 kJ/kg
Flash point (closed cup) .....	61 °C
Autoignition temperature .....	640 °C
Explosivity limits in air (lower / upper).....	1.8 / 6.9 % (v/v)
Electrical conductivity at 22 °C .....	2.3 µS/m
Water solubility at 20 °C .....	complete
Azeotrope with water : - boiling point at 1013 hPa .....	99.6 °C
- water content (% w/w) .....	87 %
Hansen solubility parameters at 25°C ( $\delta$ t, $\delta$ d, $\delta$ p, $\delta$ h) .....	20.8 / 15.8 / 8.2 / 10.8 MPa <sup>1/2</sup>

Updated: January 08, 2020    Revision: 3    File n°: 30.GA.03.2014

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This grade is suitable for many different applications. Therefore, any use of our grade as finished products intended to be used in specific markets including but not limited to drinking water treatment, cosmetics, pharmaceuticals products, food additives is under the sole responsibility of the Client. The Client must assume all risks and liability in connection herewith.

See MSDS for Health & Safety Considerations