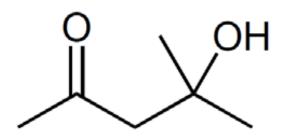


# **Diacetone Alcohol (DAA)**



**Diacetone Alcohol (DAA)** is a clear, colorless liquid ketone-alcohol. The principal end uses of DAA are in industrial coatings, household cleaners, inks, paints, paint removers, paint thinners, pharmaceutical preparations, sealants, primer and pesticides. DAA is used as a chemical intermediate in the preparation of Methyl Isobutyl Ketone and Hexylene Glycol.

#### **CAS** number

123-42-2

# **Synonyms**

4-Hydroxy-4-methylpentan-2-one; 2-Pentanone, 4-hydroxy-4-methyl-

### **Product code**

40747

### **Typical Physical Properties of DAA**

Molecular Weight	116.2 g/mol
Empirical Formula	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>
Appearance	Colorless Liquid
Freezing Point	-47°C (-52.6°F)
Boiling Point @ 760mm Hg	168°C (334°F)
Flash Point – Closed Cup	61-65.6°C (142-150°F)
Autoignition Temperature	640°C
Density @ 20°C	0.938 kg/L
	7.83 lb/gal
Vapor Pressure @ 20°C	0.12 kPa
Solubility in Water @ 20°C	Miscible
Surface Tension @ 20°C	30 dyne/cm
Refractive Index @ 20°C	1.421
Viscosity @ 20°C	2.9 cP
Lower Explosive Limit	1.8 v/v%
Upper Explosive Limit	6.9 v/v%
Conductivity @ 20°C	20 μS/m
Dielectric Constant @ 20°C	18.2
Specific Heat @ 20°C	1.9 J/g/°C
Heat of Vaporization @ normal boiling point	377 J/g
Heat of Combustion @ 25°C	28.5 kJ/g
Odor Threshold	0.27 ppm
Evaporation Rate (nBuAc = 1)	0.15

Note: The properties reported above are typical physical properties. Monument Chemical in no way guarantees that the product from any particular lot will conform exactly to the given values.





# **Health and safety information**

Under current U.S. OSHA's Hazardous Communication program DAA is classified as a combustible liquid, serious eye and respiratory irritation, and reproductive toxicity hazard. Keep the material away from heat sources, hot surfaces, open flames, and sparks.

Observe good industrial hygiene practices and use appropriate Personal Protective Equipment.

For full safety information please refer to the Safety Data Sheet.

# Storage and Handling

General industry practice is to store DAA in carbon steel vessels. Storage in properly lined steel or stainless steel to avoid slight discoloration from carbon steel is recommended. Product stored or delivered in unlined carbon steel vessels must be filtered due to technically unavoidable particles.

DAA should be stored under a nitrogen blanket when available. Avoid contact with air when storing for long periods of time. This product may absorb water if exposed to air.

DAA should be stored only in tightly closed, properly vented containers away from heat, sparks, open flame or strong oxidizing agents. Handle empty containers carefully. Combustible residue remains after emptying.

Provided proper storage and handling precautions are taken, DAA manufactured and delivered by Monument Chemical is stable for at least 12 months from the date of manufacture. DAA that is subsequently repackaged, handled and/or delivered by third parties may have a different shelf life and may require third party shelf-life studies. Color may increase overtime depending on storage conditions. Product past the retest date should be evaluated to

confirm that all specifications are within their limits before use.

#### **Additional Information**

To learn more about Monument Chemical and the products and services we offer please visit our website at www.monumentchemical.com.

Effective Date: 2/19/24

Revision: 5

#### **Disclaimers**

Please refer to the Safety Data Sheet (SDS) for complete information on Storage and Handling, Toxicological Properties, Personal Protection, First Aid, Spill and Leak Procedures, and Waste Disposal. To order an SDS, email <a href="mailto:SDS@monumentchemical.com">SDS@monumentchemical.com</a>. Before using or handling this product, the SDS should be thoroughly reviewed.

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