

## Section 1 - Product and Company Information

Product Name ACETOL, TECH., 90%  
 Product Number 138185  
 Brand ALDRICH

Company Sigma-Aldrich Canada, Ltd  
 Address 2149 Winston Park Drive  
 Oakville ON L6H 6J8 CA  
 Technical Phone: 9058299500  
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## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
ACETOL	116-09-6	No
Formula	C3H6O2	
Synonyms	Acetol * Acetone alcohol * Acetylcarbinol * Acetylmethanol * Hydroxyacetone * alpha-Hydroxyacetone * Hydroxymethyl methyl ketone * Hydroxypropanone * Methanol, acetyl- * 2-Oxopropanol * Rongal 5242	
RTCS Number:	UC2800000	

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Combustible.

## HMIS RATING

HEALTH: 0  
 FLAMMABILITY: 2  
 REACTIVITY: 1

## NFPA RATING

HEALTH: 0  
 FLAMMABILITY: 2  
 REACTIVITY: 1

For additional information on toxicity, please refer to Section 11.

## Section 4 - First Aid Measures

## ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

## INHALATION EXPOSURE

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

## DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

## EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

## Section 5 - Fire Fighting Measures

## FLASH POINT

132.8 °F 56 °C Method: closed cup

## EXPLOSION LIMITS

Lower: 3 % Upper: 14.9 %

## AUTOIGNITION TEMP

280 °C

## FLAMMABILITY

N/A

## EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

## FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions. Vapor may travel considerable distance to source of ignition and flash back.

## Section 6 - Accidental Release Measures

## METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

## Section 7 - Handling and Storage

## HANDLING

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

## STORAGE

Suitable: Keep tightly closed.  
 Store at 2-8°C

## SPECIAL REQUIREMENTS

Hygroscopic. Store under inert gas. Air sensitive.

## Section 8 - Exposure Controls / PPE

## ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

## PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN

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(EU). Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges.

Hand: Protective gloves.  
 Eye: Chemical safety goggles.

## GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

## Section 9 - Physical/Chemical Properties

Appearance	Physical State: Clear liquid Color: Light yellow	
Property	Value	At Temperature or Pressure
Molecular Weight	74.08 AMU	
pH	3.4	20 °C Concentration: 50 g/l
BP/BP Range	145.0 - 146.0 °C	
MP/MP Range	- 17.0 °C	
Freezing Point	N/A	
Vapor Pressure	5.6 mmHg	20 °C
Vapor Density	7.4 g/l	
Saturated Vapor Conc.	N/A	
SG/Density	1.08 g/cm3	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	0.001 Pas	48 °C
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	132.8 °F 56 °C	Method: closed cup
Explosion Limits	Lower: 3 % Upper: 14.9 %	
Flammability	N/A	
Autoignition Temp	280 °C	
Refractive Index	1.425	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

N/A = not available

## Section 10 - Stability and Reactivity

## STABILITY

Stable: Stable.  
 Conditions to Avoid: Moisture. Air.  
 Materials to Avoid: Strong acids, Strong oxidizing agents.

## HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

## HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## Section 11 - Toxicological Information

## ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.  
 Skin Absorption: May be harmful if absorbed through the skin.  
 Eye Contact: May cause eye irritation.  
 Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.  
 Ingestion: May be harmful if swallowed.

## SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## TOXICITY DATA

Oral Oral  
 Rat Rat  
 2200 mg/kg 2200 mg/kg  
 LD50 LD50

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

## APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## Section 14 - Transport Information

## DOT

Proper Shipping Name: Ketones, liquid, n.o.s.  
 UN#: 1224  
 Class: 3  
 Packing Group: Packing Group III  
 Hazard Label: Flammable liquid  
 PIH: Not PIH

## IATA

Proper Shipping Name: Ketones, liquid, n.o.s.  
 IATA UN Number: 1224  
 Hazard Class: 3  
 Packing Group: III

## Section 15 - Regulatory Information

## EU ADDITIONAL CLASSIFICATION

S: 23-24/25  
 Safety Statements: Do not breathe vapor. Avoid contact with skin and eyes.

## US CLASSIFICATION AND LABEL TEXT

US Statements: Combustible.

## UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

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TSCA INVENTORY ITEM: Yes Yes

## CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes  
 NDSL: No

## Section 16 - Other Information

## DISCLAIMER

For R&D use only. Not for drug, household or other uses.

## WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2009 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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