

## Section 1 - Product and Company Information

Product Name 4-ISOPROPYLBENZALDEHYDE, 98%  
Product Number 135178  
Brand ALDRICH

Company Sigma-Aldrich Canada, Ltd  
Address 2149 Winston Park Drive  
Oakville ON L6H 6J8 CA  
Technical Phone: 9058299500  
Fax: 9058299292  
Emergency Phone: 800-424-9300

## Section 2 - Composition/Information on Ingredient

| Substance Name           | CAS #   | SARA 313 |
|--------------------------|---|----------|
| 4-ISO-PROPYLBENZALDEHYDE | 122-03-2  | No       |
| Formula                  | C10H12O   |          |
| Synonyms                 | Benzaldehyde, 4-(1-methylethyl)- (9CI) *<br>Cumaldehyde * Cumic aldehyde * p-Cumic aldehyde *<br>Cuminal * Cuminaldehyde * Cuminic aldehyde *<br>Cuminyl aldehyde * p-Isopropylbenzaldehyde *<br>4-Isopropylbenzaldehyde *<br>p-Isopropylbenzenecarboxaldehyde *<br>4-(1-Methylethyl)benzaldehyde |          |
| RTCS Number:             | CU7000000   |          |

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Harmful.  
Irritating to eyes, respiratory system and skin. Harmful if swallowed.

## HMIS RATING

HEALTH: 2  
FLAMMABILITY: 1  
REACTIVITY: 0

## NFPA RATING

HEALTH: 2  
FLAMMABILITY: 1  
REACTIVITY: 0

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

206.6 °F 97 °C Method: closed cup

## AUTOIGNITION TEMP

N/A

## 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.

## Section 6 - Accidental Release Measures

## PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

## PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

## 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: Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

## STORAGE

Suitable: Keep tightly closed.

## Section 8 - Exposure Controls / PPE

## ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

## PERSONAL PROTECTIVE EQUIPMENT

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Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.  
Hand: Compatible chemical-resistant gloves.  
Eye: Chemical safety goggles.

## GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

## Section 9 - Physical/Chemical Properties

| Appearance            | Physical State: Clear liquid<br>Color: Very deep red |                            |
|-----------------------|--|----------------------------|
| Property              | Value  | At Temperature or Pressure |
| Molecular Weight      | 148.21 AMU   |                            |
| pH                    | N/A  |                            |
| BP/BP Range           | 232.0 - 235.0 °C                                     |                            |
| MP/MP Range           | N/A  |                            |
| Freezing Point        | N/A  |                            |
| Vapor Pressure        | < 0.1 mmHg   | 20 °C                      |
| Vapor Density         | N/A  |                            |
| Saturated Vapor Conc. | N/A  |                            |
| SG/Density            | 0.981 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             | N/A  |                            |
| Surface Tension       | N/A  |                            |
| Partition Coefficient | N/A  |                            |
| Decomposition Temp.   | N/A  |                            |
| Flash Point           | 206.6 °F 97 °C                                       | Method: closed cup         |
| Explosion Limits      | N/A  |                            |
| Flammability          | N/A  |                            |
| Autoignition Temp     | N/A  |                            |
| Refractive Index      | 1.53   |                            |
| Optical Rotation      | N/A  |                            |
| Miscellaneous Data    | N/A  |                            |
| Solubility            | N/A  |                            |

N/A - not available

## Section 10 - Stability and Reactivity

## STABILITY

Stable: Stable.  
Materials to Avoid: Strong oxidizing agents, Strong bases.

## 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: Causes skin irritation.  
Skin Absorption: May be harmful if absorbed through the skin.  
Eye Contact: Causes eye irritation.  
Inhalation: Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.  
Ingestion: 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  
Rat  
1390 mg/kg  
LD50  
Remarks: Behavioral:Somnolence (general depressed activity).  
Liver:Other changes. Gastrointestinal:Ulceration or bleeding from stomach.

Oral  
Mouse  
2400 mg/kg  
LD50  
Remarks: Tumorigenic:Active as anti-cancer agent.

Skin  
Rabbit  
2800 mg/kg  
LD50

## IRRITATION DATA

Skin  
Rabbit  
500 mg  
24H

## 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: None  
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

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## IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

## Section 15 - Regulatory Information

## EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn  
Indication of Danger: Harmful.  
R: 22-36/37/38  
Risk Statements: Harmful if swallowed. Irritating to eyes, respiratory system and skin.  
S: 26-36  
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

## US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.  
Risk Statements: Harmful if swallowed. Irritating to eyes, respiratory system and skin.  
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

## UNITED STATES REGULATORY INFORMATION

SARA LISTED: No  
TSCA INVENTORY ITEM: 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.  
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