

## Material Safety Data Sheet

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Version 1.1

According to 91/155/EEC

## 1 - Product and Company Information

Product Name 2-BUTANONE PEROXIDE  
Product Number 04390

Company Sigma-Aldrich Company Ltd.  
The Old Brickyard  
New Road, Gillingham SP8 4XT  
United Kingdom

Technical Phone # 44-(0)-1747-833000  
Fax 44-(0)-1747-833313  
Emergency Phone # 44-(0)-1747-833100

## 2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
2-BUTANONE PEROXIDE	None	None	None

  

Ingredient Name	Percent	CAS #	EC no	Annex I Index Number
METHYL ETHYL KETONE PEROXIDE	>= 30 < 35	1338-23-4	215-661-2	None
Symbols: O-C R-Phrases: 7-22-34 May cause fire. Harmful if swallowed. Causes burns.				
4-HYDROXY-4-METHYL-2-PENTANONE	>= 12.5 < 15	123-42-2	204-626-7	603-016-00-1
Symbols: Xi R-Phrases: 36 Irritating to eyes.				
HYDROGEN PEROXIDE	>= 3 < 5	7722-84-1	231-765-0	008-003-00-9
Symbols: O-C R-Phrases: 5-8-20/22-35 Heating may cause an explosion. Contact with combustible material may cause fire. Harmful by inhalation and if swallowed. Causes severe burns.				
2-BUTANONE	>= 3 < 5	78-93-3	201-159-0	606-002-00-3
Symbols: F-Xi R-Phrases: 11-36-66-67 Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapors may cause drowsiness and dizziness.				

Molecular Weight 210.2 AMU

## 3 - Hazards Identification

May cause fire. Harmful if swallowed. Causes burns.

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#### 4 - First Aid Measures

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##### AFTER INHALATION

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

##### AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

##### AFTER EYE CONTACT

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.

##### AFTER INGESTION

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

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#### 5 - Fire Fighting Measures

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##### EXTINGUISHING MEDIA

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

##### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions. Contact with other material may cause fire. May accelerate combustion. Combustible liquid.  
Explosion Hazards: May explode when heated. Container explosion may occur under fire conditions.

##### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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#### 6 - Accidental Release Measures

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##### PERSONAL PRECAUTION PROCEDURES 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.

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#### 7 - Handling and Storage

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##### HANDLING

Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.



Conductivity N/A  
Miscellaneous Data N/A  
Solubility N/A

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Materials to Avoid: Reducing agents, Heavy metals, Acids, Bases, Organic materials, Metal oxides, Heavy metal salts, Amines.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## 11 - Toxicological Information

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### ACUTE TOXICITY

LD50

Oral

Rat

1,017 mg/kg

40% IN DIMETHYLPHTHALATE

LC50

Inhalation

Rat

17,000 mg/m<sup>3</sup>

LD50

Skin

Rat

1.8 - 3.6 mg/kg

40% IN DIMETHYLPHTHALATE

### SIGNS AND SYMPTOMS OF EXPOSURE

Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

### ROUTE OF EXPOSURE

Skin Contact: Causes burns.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes burns.

Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed.

### TARGET ORGAN INFORMATION

Nerves. Liver. Kidneys. Blood.

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## 12 - Ecological Information

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No data available.

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## 13 - Disposal Considerations

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### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

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#### 14 - Transport Information

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##### RID/ADR

UN#: 3105  
Class: 5.2  
Proper Shipping Name: Organic peroxide type D, liquid

##### IMDG

UN#: 3105  
Class: 5.2  
PG: II  
Proper Shipping Name: Organic peroxide type D, liquid  
Marine Pollutant: No  
Severe Marine Pollutant: No  
Technical Name: Required

##### IATA

UN#: 3105  
Class: 5.2  
Proper Shipping Name: Organic peroxide type D, liquid  
Inhalation Packing Group I: No  
Technical Name: Required

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#### 15 - Regulatory Information

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##### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: O-C

Oxidizing. Corrosive.

R-PHRASES: 7-22-34

May cause fire. Harmful if swallowed. Causes burns.

S-PHRASES: 3/7-14-26-36/37/39-45

Keep container tightly closed in a cool place. Keep away from strong acids and bases. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

##### COUNTRY SPECIFIC INFORMATION

##### Germany

WGK: 1  
Self-Classification

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#### 16 - Other Information

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##### 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 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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