

## 1 - Product and Company Information

ProductName BUTANE-1,1,1,4,4,4-D6, 98 ATOM % D

## 2 - Hazards Identification

### SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Highly flammable. Irritating to eyes and respiratory system.

## 3 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I
BUTANE-1,1,1,4,4,4-D6, 98 ATOM % D	13183-67-0	None	None
Formula	C4H4D6		

Molecular Weight 64.17 AMU

## 4 - First Aid Measures

### AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

### AFTER INGESTION

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

## 5 - Fire Fighting Measures

### SPECIAL RISKS

Specific Hazard(s): Vapor may travel considerable distance to source of ignition and flash back.

Explosion Hazards: May form explosive mixtures with air. Vapor may travel considerable distance to source of ignition and flash back.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

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

## 6 - Accidental Release Measures

### PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area and keep personnel upwind. Shut off all sources of ignition. Shut off leak if there is no risk.

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

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

### METHODS FOR CLEANING UP

Ventilate area and wash spill site after material pickup is complete.

## 7 - Handling and Storage

### HANDLING

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

### STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat, sparks, and open flame. Cylinder temperature should not exceed 125°F (52°C).

### SPECIAL REQUIREMENTS: Contents under pressure.

## 8 - Exposure Controls / Personal Protection

### ENGINEERING CONTROLS

Mechanical exhaust required.

### WORK PRACTICES

Store and use with adequate ventilation.

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: 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 ABEK (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 Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

## 9 - Physical and Chemical Properties

pH N/A

BP/BP Range N/A

MP/MP Range N/A

Flash Point N/A

Flammability N/A

Autoignition Temp N/A

Oxidizing Properties N/A

Explosive Properties N/A

Explosion Limits N/A

Vapor Pressure N/A

Partition Coefficient N/A

Viscosity N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

Evaporation Rate N/A

Bulk Density N/A

Decomposition Temp. N/A

Solvent Content N/A

Water Content N/A

Surface Tension N/A

Conductivity N/A

Miscellaneous Data N/A

Solubility N/A

## 10 - Stability and Reactivity

### STABILITY

Materials to Avoid: Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

## 11 - Toxicological Information

### SIGNS AND SYMPTOMS OF EXPOSURE

Dermatitis. Narcotic effect. Congestion and irritation of the throat, nasal passages and upper respiratory system. Exposure can cause:

### ROUTE OF EXPOSURE

Eye Contact: Causes eye irritation.

Inhalation: Can cause rapid suffocation. May be harmful if inhaled.

## 12 - Ecological Information

No data available.

## 13 - Disposal Considerations

### SUBSTANCE DISPOSAL

Observe all federal, state, and local environmental regulations.

### CONTAMINATED CONTAINER DISPOSAL

Caution: no-return cylinder. Do not reuse. Empty cylinder will contain hazardous residue. Follow proper disposal techniques.

## 14 - Transport Information

### RID/ADR

UN#: 1011

Class: 2.1

Proper Shipping Name: Butane

Marine Pollutant: No

Severe Marine Pollutant: No

### IMDG

UN#: 1011

Class: 2.1

Proper Shipping Name: Butane

Marine Pollutant: No

Severe Marine Pollutant: No

### IATA

UN#: 1011

Class: 2.1

Proper Shipping Name: Butane

Marine Pollutant: No

Severe Marine Pollutant: No

## 15 - Regulatory Information

### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

R-Hazardous to the environment: Irritant.

R-Phrases: 11-36/37

S-Hazardous to the environment: Irritating to eyes and respiratory system.

S-Phrases: 16-26-33-38

Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take precautionary measures against static discharge. In case of insufficient ventilation, wear suitable

respiratory equipment.

Caution: Substance not yet fully tested (EU).

### COUNTRY SPECIFIC INFORMATION

#### Germany

WGK: 3

Self-Classification:

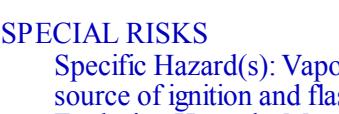
## 16 - Other Information

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

resulting from the properties of the product. LookChem 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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