

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/09/2024

Reviewed on 07/08/2024

## 1 Identification

- **Product identifier**
- **Trade name:** 3-Hydroxy-3-methyl-2-butanone
- **Article number:** 225675
- **CAS Number:**  
115-22-0
- **EC number:**  
204-073-1
- **Application of the substance / the mixture** Laboratory chemicals for research and development
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
BeanTown Chemical  
9 Sagamore Park Road  
Hudson, NH 03051  
USA
  
- **Phone:** (603) 402-2234
- **Fax:** (603) 402-9713
- **Email:** [technical@beantownchem.com](mailto:technical@beantownchem.com)
- **www.beantownchem.com**
  
- **Information department:** Technical Support Department
- **Emergency telephone number:**  
During normal operating hours, please call (603) 402-2234  
After hours, please call Chemtrec at (800) 424-9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

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- **Label elements**
  - **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**



GHS02

- **Signal word** Warning
- **Hazard statements**  
Flammable liquid and vapor.
- **Precautionary statements**  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**  
115-22-0 3-Hydroxy-3-methyl-2-butanone
- **Identification number(s)**
- **EC number:** 204-073-1

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

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### · **Protective Action Criteria for Chemicals**

#### · **PAC-1:**

*Substance is not listed.*

#### · **PAC-2:**

*Substance is not listed.*

#### · **PAC-3:**

*Substance is not listed.*

## 7 Handling and storage

### · **Handling:**

· **Precautions for safe handling** *No special precautions are necessary if used correctly.*

### · **Information about protection against explosions and fires:**

*Keep ignition sources away - Do not smoke.*

*Protect against electrostatic charges.*

### · **Conditions for safe storage, including any incompatibilities**

#### · **Storage:**

· **Requirements to be met by storerooms and receptacles:** *No special requirements.*

· **Information about storage in one common storage facility:** *Not required.*

· **Further information about storage conditions:** *Keep receptacle tightly sealed.*

· **Specific end use(s)** *No further relevant information available.*

## 8 Exposure controls/personal protection

### · **Additional information about design of technical systems:**

*Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute*

### · **Control parameters**

· **Components with limit values that require monitoring at the workplace:** *Not required.*

· **Additional information:** *The lists that were valid during the creation were used as basis.*

### · **Exposure controls**

#### · **Personal protective equipment:**

#### · **General protective and hygienic measures:**

*Immediately remove all soiled and contaminated clothing.*

*Wash hands before breaks and at the end of work.*

· **Breathing equipment:** *Not required.*

#### · **Protection of hands:**

*Protective gloves*

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

*Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.*

*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*

#### · **Material of gloves**

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.*

#### · **Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

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· Eye protection: Tightly sealed goggles

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

<b>Form:</b>	Liquid
<b>Color:</b>	Not determined.
<b>Odor:</b>	Characteristic
<b>Odor threshold:</b>	Not determined.

<b>pH-value:</b>	Not determined.
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#### · Change in condition

<b>Melting point/Melting range:</b>	Undetermined
<b>Boiling point/Boiling range:</b>	140-141 °C (284-285.8 °F)

<b>Flash point:</b>	42 °C (107.6 °F)
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<b>Flammability (solid, gaseous):</b>	Not applicable.
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<b>Decomposition temperature:</b>	Not determined.
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<b>Auto igniting:</b>	Not determined.
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<b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
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#### · Explosion limits:

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

<b>Vapor pressure:</b>	Not determined.
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<b>Density at 20 °C (68 °F):</b>	0.971 g/cm <sup>3</sup> (8.103 lbs/gal)
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<b>Relative density</b>	Not determined.
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<b>Vapor density</b>	Not determined.
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<b>Evaporation rate</b>	Not determined.
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#### · Solubility in / Miscibility with

<b>Water:</b>	Not miscible or difficult to mix.
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<b>Partition coefficient (n-octanol/water):</b>	Not determined.
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#### · Viscosity:

<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>VOC content:</b>	0.00 %
	0.0 g/l / 0.00 lb/gal

<b>Solids content:</b>	0.0 %
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<b>Other information</b>	No further relevant information available.
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## 10 Stability and reactivity

<b>Reactivity</b>	No further relevant information available.
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- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**

· <b>IARC (International Agency for Research on Cancer)</b>
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Substance is not listed.
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· <b>NTP (National Toxicology Program)</b>
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Substance is not listed.
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· <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>
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Substance is not listed.
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## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
- Water hazard class 1 (Self-assessment): slightly hazardous for water
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

<b>· UN-Number</b>	
<b>· DOT, IMDG, IATA</b>	UN1224
<b>· UN proper shipping name</b>	
<b>· DOT</b>	Ketones, liquid, n.o.s.
<b>· IMDG, IATA</b>	KETONES, LIQUID, N.O.S.
<b>· Transport hazard class(es)</b>	
<b>· DOT, IMDG, IATA</b>	
<b>· Class</b>	3 Flammable liquids
<b>· Label</b>	3
<b>· Packing group</b>	
<b>· DOT, IMDG, IATA</b>	III
<b>· Environmental hazards:</b>	
<b>· Marine pollutant:</b>	No
<b>· Special precautions for user</b>	Warning: Flammable liquids
<b>· Stowage Category</b>	A
<b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>· UN "Model Regulation":</b>	UN 1224 KETONES, LIQUID, N.O.S., 3, III

## 15 Regulatory information

<b>· Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
No further relevant information available.	
<b>· Sara</b>	
<b>· Section 355 (extremely hazardous substances):</b>	
Substance is not listed.	
<b>· Section 313 (Specific toxic chemical listings):</b>	
Substance is not listed.	
<b>· TSCA (Toxic Substances Control Act):</b>	
ACTIVE	
<b>· Hazardous Air Pollutants</b>	
Substance is not listed.	
<b>· Proposition 65</b>	
<b>· Chemicals known to cause cancer:</b>	
Substance is not listed.	
<b>· Chemicals known to cause reproductive toxicity for females:</b>	
Substance is not listed.	

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· **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

· **Chemicals known to cause developmental toxicity:**

Substance is not listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

Substance is not listed.

· **TLV (Threshold Limit Value)**

Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

· **RTECS**

Substance is not listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **NFPA ratings (scale 0-4)**

Health = 0

Fire = 2

Reactivity = 0

· **HMIS ratings (scale 0-4)**

Health = 0

Fire = 2

Reactivity = 0

· **Department issuing SDS:** Technical Support Department

· **Contact:** Technical Support Department

· **Date of preparation / last revision** 07/09/2024 / -

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Liq. 3: Flammable liquids – Category 3