

# SAFETY DATA SHEET



n-Butanol  
10420

Version / Revision  
Supersedes Version

4.01  
4.00\*\*\*

Revision Date  
Issuing date

26-Jan-2021  
26-Jan-2021

## SECTION 1: Identification

### 1.1. Product identifier

Identification of the  
substance/preparation

**n-Butanol**

CAS-No

71-36-3

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance /  
Preparation

Intermediate  
solvent

Uses advised against

None

### 1.3. Details of the supplier of the safety data sheet

Supplier

**OQ Chemicals Corporation**  
15375 Memorial Drive  
West Memorial Place I  
Suite 300  
Houston, TX 77079  
USA  
Phone +1 346 378 7300

Product Information

Product Stewardship  
FAX: +49 (0)208 693 2053  
email: sc.psq@oq.com

### 1.4. Emergency telephone number

Emergency telephone number

NCEC +1 202 464 2554  
available 24/7

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

This substance is classified in accordance with paragraph (d) of §1910.1200 (GHS-US classification).

Skin corrosion/irritation Category 2, H315

Serious eye damage/eye irritation Category 1, H318

Target Organ Systemic Toxicant - Single exposure Category 3, H335; Category 3, H336

Flammable liquid Category 3, H226

Emergency telephone number

1 / 16

NCEC +1 202 464 2554  
USA (A-US)

# SAFETY DATA SHEET



n-Butanol  
10420

Version / Revision 4.01

OSHA Specified Hazards Not applicable.

## 2.2. Label elements

Labeling according to §1910.1200 (GHS-US labeling).

### Hazard symbol(s)



Signal word

**Danger**

Hazard statements

H226: Flammable liquid and vapor.  
H315: Causes skin irritation.  
H318: Causes serious eye damage.  
H335: May cause respiratory irritation.  
H336: May cause drowsiness or dizziness.

Precautionary statements

Prevention

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233: Keep container tightly closed.  
P240: Ground and bond container and receiving equipment.  
P241: Use explosion-proof electrical/ ventilating/ lighting equipment.  
P242: Use non-sparking tools.  
P243: Take precautionary measures against static discharge.  
P261: Avoid breathing gas/mist/vapours.  
P264: Wash hands thoroughly after handling.  
P271: Use only outdoors or in a well ventilated area.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.\*\*\*

Response

P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P332 + P313: If skin irritation occurs: Get medical advice/ attention.  
P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER/doctor.  
P362 + P364: Take off contaminated clothing and wash it before reuse.\*\*\*

Storage

P403 + P235: Store in a well ventilated place. Keep cool.  
P405: Store locked up.

Emergency telephone number  
2 / 16

NCEC +1 202 464 2554  
USA (A-US)

# SAFETY DATA SHEET



n-Butanol  
10420

Version / Revision 4.01

**Disposal** P501: Dispose of contents/container in accordance with local regulation.

## 2.3. Other hazards

Vapour is heavier than air and can travel considerable distance to a source of ignition and flashback  
Vapours may form explosive mixture with air  
Components of the product may be absorbed into the body by inhalation, ingestion and through the skin

## SECTION 3: Composition / information on ingredients

### 3.1. Substances

Component	CAS-No	Concentration (%)
Butan-1-ol	71-36-3	> 99,80

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

Keep at rest. Aerate with fresh air. When symptoms persist or in all cases of doubt seek medical advice.

#### Skin

Wash off immediately with soap and plenty of water. When symptoms persist or in all cases of doubt seek medical advice.

#### Eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

#### Ingestion

Rinse mouth. Call a physician immediately. If conscious, drink plenty of water. Do not induce vomiting without medical advice.

### 4.2. Most important symptoms and effects, both acute and delayed

#### Main symptoms

cough, headache, dizziness, drowsiness, nausea, vomiting, abdominal pain, unconsciousness, diarrhea.

#### Special hazard

Lung irritation, Pneumonia.

### 4.3. Indication of any immediate medical attention and special treatment needed

#### General advice

Remove contaminated, soaked clothing immediately and dispose of safely. If unconscious place in recovery position and seek medical advice. First aider needs to protect himself.

# SAFETY DATA SHEET



n-Butanol  
10420

Version / Revision 4.01

Treat symptomatically. If ingested, irrigate the stomach using activated charcoal. Chemical pneumonitis could follow respiratory exposure.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

dry chemical, carbon dioxide (CO<sub>2</sub>), water spray, alcohol-resistant foam

#### Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Special hazards arising from the substance or mixture

Under conditions giving incomplete combustion, hazardous gases produced may consist of:

carbon monoxide (CO)

carbon dioxide (CO<sub>2</sub>)

Combustion gases of organic materials must in principle be graded as inhalation poisons

Vapour is heavier than air and can travel considerable distance to a source of ignition and flashback

Vapours may form explosive mixture with air

### 5.3. Advice for firefighters

#### Special protective equipment for firefighters

Fire fighter protection should include a self-contained breathing apparatus (NIOSH-approved or EN 133) and full fire-fighting turn out gear.

#### Precautions for firefighting

Cool containers / tanks with water spray. Dike and collect water used to fight fire. Keep people away from and upwind of fire. Do not allow run-off from fire fighting to enter drains or water courses. Foam should be applied in large quantities as it is broken down to some extent by the product.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: For personal protective equipment see section 8. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas. Keep away from heat and sources of ignition.

For emergency responders: Personal protection see section 8.

### 6.2. Environmental precautions

Prevent further leakage or spillage. Do not discharge product into the aquatic environment without pretreatment (biological treatment plant).

### 6.3. Methods and material for containment and cleaning up

# SAFETY DATA SHEET



**n-Butanol**  
**10420**

**Version / Revision** 4.01

## **Methods for containment**

Stop the flow of material, if possible without risk. Dike spilled material, where this is possible.

## **Methods for cleaning up**

Soak up with inert absorbent material (e.g. universal binder). Keep in suitable, closed containers for disposal. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Dispose of in accordance with local regulations. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

## **6.4. Reference to other sections**

For personal protective equipment see section 8.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Provide sufficient air exchange and/or exhaust in work rooms.

#### **Hygiene measures**

When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

#### **Advice on the protection of the environment**

See Section 8: Environmental exposure controls.

#### **Incompatible products**

strong oxidizing agents  
acids  
acid chlorides  
reducing agents

### **7.2. Conditions for safe storage, including any incompatibilities**

#### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). In case of fire, emergency cooling with water spray should be available. Ground and bond containers when transferring material. Vapour is heavier than air and can travel considerable distance to a source of ignition and flashback. Vapours may form explosive mixture with air.

#### **Technical measures/Storage conditions**

Keep containers tightly closed in a cool, well-ventilated place. Handle and open container with care.

#### **Suitable material**

stainless steel, mild steel

#### **Unsuitable material**

**Emergency telephone number**  
5 / 16

NCEC +1 202 464 2554  
USA (A-US)

# SAFETY DATA SHEET



n-Butanol  
10420

Version / Revision 4.01

Attacks some forms of plastic and rubber, Natural Rubber

## SECTION 8: Exposure controls / personal protection

### 8.1. Control parameters

Exposure limits United States of America

#### US ACGIH

Component	TWA (mg/m <sup>3</sup> )	TWA (ppm)	STEL (mg/m <sup>3</sup> )	STEL (ppm)
Butan-1-ol CAS: 71-36-3		20		

#### US OSHA Z-1

Component	Ceiling (mg/m <sup>3</sup> )	Ceiling (ppm)	PEL (mg/m <sup>3</sup> )	PEL (ppm)	Skin Designation
Butan-1-ol CAS: 71-36-3			300	100	

#### Note

For details and further information please refer to the original regulation.

### 8.2. Exposure controls

#### Appropriate Engineering controls

General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Explosion-proof equipment (for example fans, switches, and grounded ducts) should be used in mechanical ventilation systems.

#### Individual protection measures, such as personal protective equipment

##### General industrial hygiene practice

Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Ensure that eyewash stations and safety showers are close to the workstation location.

##### Hygiene measures

When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

##### Eye protection

Tightly fitting safety goggles. In addition to goggles, wear a face shield if there is a reasonable chance for splash to the face.

##### Hand protection

Wear protective gloves. Recommendations are listed below. Other protective material may be used, depending on the situation, if adequate degradation and permeation data is available. If other chemicals are used in conjunction with this chemical, material selection should be based on protection for all chemicals present.

# SAFETY DATA SHEET



n-Butanol  
10420

Version / Revision

4.01

**Suitable material** butyl-rubber  
**Evaluation** according to EN 374: level 6  
**Glove thickness** approx 0,3 mm  
**Break through time** > 480 min

**Suitable material** nitrile rubber  
**Evaluation** according to EN 374: level 6  
**Glove thickness** approx 0,55 mm  
**Break through time** > 480 min

## Skin and body protection

Impervious clothing. Wear face-shield and protective suit for abnormal processing problems.

## Respiratory protection

Respirator with filter for organic vapour. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (vapor or mist). Equipment should conform to NIOSH.\*\*\*

## Environmental exposure controls

If possible use in closed systems. If leakage can not be prevented, the substance needs to be suck off at the emersion point, if possible without danger. Observe the exposure limits, clean exhaust air if needed. If recycling is not practicable, dispose of in compliance with local regulations. Inform the responsible authorities in case of leakage into the atmosphere, or of entry into waterways, soil or drains.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Appearance** liquid  
**Colour** colourless  
**Odour** alcoholic  
**Odour threshold** No data available  
**pH** neutral  
**Melting point/range** < -130 °F (< -90 °C) @ 1013 hPa (Pour point)  
**Boiling point/range** 246,2 °F (119 °C)\*\*\*  
**Method** OECD 103\*\*\*  
**Flash point** 95 °F (35 °C) @ 1 atm (101,3 kPa)  
**Method** ISO 2719  
**Evaporation rate** No data available  
**Flammability (solid, gas)** Does not apply, the substance is a liquid  
**Lower explosion limit** 1,4 Vol %  
**Upper explosion limit** 11,3 Vol %

### Vapour pressure

Values [hPa]	Values [kPa]	Values [atm]	@ °C	@ °F	Method
10	1	0,010	20	68	DIN EN 13016-2***
53	5,3	0,052	50	122	DIN EN 13016-2***

# SAFETY DATA SHEET



n-Butanol  
10420

Version / Revision

4.01

<b>Vapour density</b>	2,6 (Air = 1) @ 20 °C (68 °F)		
<b>Relative density</b>			
Values	@ °C	@ °F	Method
0,81	20	68	DIN 51757
<b>Solubility</b>	66 g/l @ 68 °F (20 °C), in water, OECD 105***		
<b>log Pow</b>	1 @ 25 °C (77 °F) OECD 117***		
<b>Autoignition temperature</b>	671 °F (355 °C) @ 1 atm (101,3 kPa)		
Method	DIN 51794		
<b>Decomposition temperature</b>	No data available		
<b>Viscosity</b>	2,947 mPa*s @ 68 °F (20 °C)		
Method	dynamic, DIN 51562		

## 9.2. Other information

<b>Molecular weight</b>	74,12
<b>Molecular formula</b>	C <sub>4</sub> H <sub>10</sub> O
<b>log Koc</b>	0,54 calculated***
<b>Oxidizing properties</b>	Does not apply, substance is not oxidising. There are no chemical groups associated with oxidizing properties
<b>Refractive Index</b>	1,399 @ 68 °F (20 °C)
<b>Explosive properties</b>	Does not apply, substance is not explosive. There are no chemical groups associated with explosive properties
<b>Surface tension</b>	69,9 mN/m (1 g/l @ 20°C (68°F)), OECD 115

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

The reactivity of the product corresponds to the typical reactivity shown by the substance group as described in any text book on organic chemistry.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air.

### 10.4. Conditions to avoid

Avoid contact with heat, sparks, open flame and static discharge. Avoid any source of ignition.

### 10.5. Incompatible materials

strong oxidizing agents, acids, acid chlorides, reducing agents.

### 10.6. Hazardous decomposition products

Emergency telephone number  
8 / 16

NCEC +1 202 464 2554  
USA (A-US)

# SAFETY DATA SHEET



n-Butanol  
10420

Version / Revision 4.01

No decomposition if stored and applied as directed.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Likely routes of exposure** Ingestion, Inhalation, Eye contact, Skin contact

#### **Butan-1-ol, CAS: 71-36-3**

##### **Main symptoms**

cough, headache, dizziness, drowsiness, nausea, vomiting, abdominal pain, unconsciousness, diarrhoea.

##### **Target Organ Systemic Toxicant - Single exposure**

The available data lead to the classification given in section 2

##### **Target Organ Systemic Toxicant - Repeated exposure**

Based on available data, the classification criteria are not met for:

STOT RE

<b>Acute toxicity</b>				
<b>Butan-1-ol (71-36-3)</b>				
Routes of Exposure	Endpoint	Values	Species	Method
Oral	LD50	2292 mg/kg	rat, female	OECD 401
Inhalative	LC0	> 17,76 mg/l (4h)	rat, male/female	OECD 403
Dermal	LD50	3430 mg/kg	rabbit male	OECD 402

#### **Butan-1-ol, CAS: 71-36-3**

##### **Assessment**

Based on available data, the classification criteria are not met for:

Acute oral toxicity

Acute dermal toxicity

Acute inhalation toxicity

<b>Irritation and corrosion</b>				
<b>Butan-1-ol (71-36-3)</b>				
Target Organ Effects	Species	Result	Method	
Skin	rabbit	irritating		2h***
Eyes	rabbit	severe irritation	OECD 405	
Respiratory tract***	human***	irritating (up 200 ppm)***		10 years***
Respiratory tract***	human***	Low irritating potential***		5 min***
Respiratory tract***	rat***	irritating***		7h***

#### **Butan-1-ol, CAS: 71-36-3**

##### **Assessment**

The available data lead to the classification given in section 2

##### **Sensitization**

# SAFETY DATA SHEET



**n-Butanol**  
**10420**

**Version / Revision** 4.01

<b>Butan-1-ol (71-36-3)</b>				
Target Organ Effects	Species	Evaluation	Method	
Skin	guinea pig	not sensitizing		read across Weight of evidence***

## **Butan-1-ol, CAS: 71-36-3**

### **Assessment**

Based on available data, the classification criteria are not met for:

Skin sensitization

For respiratory sensitization, no data are available

<b>Subacute, subchronic and prolonged toxicity</b>				
<b>Butan-1-ol (71-36-3)</b>				
Type	Dose	Species	Method	
Subchronic toxicity	NOAEL: 125 mg/kg/d***	rat, male/female		Oral
Subchronic toxicity	LOAEL: 500 mg/kg/d (90d)	rat, male/female		Oral
Subchronic toxicity	NOAEL: ~ 2,35 mg/l/d (90d)	rat, male/female	EPA OTS 798.2450	Inhalation read across***

## **Butan-1-ol, CAS: 71-36-3**

### **Assessment**

Based on available data, the classification criteria are not met for:

STOT RE

<b>Carcinogenicity, Mutagenicity, Reproductive toxicity</b>					
<b>Butan-1-ol (71-36-3)</b>					
Type	Dose	Species	Evaluation	Method	
Mutagenicity		V79 cells, Chinese hamster	negative	OECD 476 (Mammalian Gene Mutation) HPRT	In vitro study
Mutagenicity		V79 cells, Chinese hamster	negative	Chromosomal Aberration	In vitro study
Mutagenicity		Salmonella typhimurium	negative	Ames test	
Mutagenicity		mouse male/female***	negative	OECD 474	Oral in vivo micronucleus test
Reproductive toxicity	NOAEL 18,5 mg/l	rat, parental			Inhalation
Reproductive toxicity	NOAEL 18,5 mg/l	rat, 1. Generation, male/female			Inhalation
Reproductive toxicity***	NOAEL 5000 mg/kg/d	rat, parental, female		Oral Systemic toxicity***	
Developmental Toxicity	NOAEL 1454 mg/kg/d	rat		OECD 414, Oral***	Maternal toxicity, Fetal toxicity
Developmental Toxicity	NOAEL 5654 mg/kg/d	rat		OECD 414, Oral***	Teratogenicity

**Emergency telephone number**  
10 / 16

NCEC +1 202 464 2554  
USA (A-US)

# SAFETY DATA SHEET



**n-Butanol**  
**10420**

**Version / Revision** 4.01

Developmental Toxicity	NOAEL 10,8 mg/l	rat		Inhalation	Maternal toxicity, Fetal toxicity
Developmental Toxicity	NOAEL 24,7 mg/l	rat		Inhalation	Teratogenicity
Carcinogenicity	no carcinogenic potential***			QSAR***	
Reproductive toxicity	NOAEL 500 mg/kg/d	rat, male/female		Oral	
Reproductive toxicity	NOAEC: 2000 ppm	rat, male/female		OECD 416 Inhalation	Fertility read across***
Reproductive toxicity***	LOEL: 300 mg/kg/d***	rat, 1. Generation, male/female***		Oral***	

## **Butan-1-ol, CAS: 71-36-3**

### **CMR Classification**

The available data on CMR properties are summarized in the table above. They do not indicate a classification into categories 1A or 1B

### **Evaluation**

In vitro tests did not show mutagenic effects  
Did not show mutagenic effects in animal experiments  
In the absence of specific alerts no cancer testing is required

## **Butan-1-ol, CAS: 71-36-3**

### **Aspiration toxicity**

Based on the viscosity a potential aspiration hazard cannot be excluded

### **Other adverse effects**

Components of the product may be absorbed into the body by inhalation, ingestion and through the skin.

### **Note**

Handle in accordance with good industrial hygiene and safety practice. Further details on substance data can be found in the registration dossier under the following link:  
<http://echa.europa.eu/information-on-chemicals/registered-substances>.

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

<b>Acute aquatic toxicity</b>			
<b>Butan-1-ol (71-36-3)</b>			
Species	Exposure time	Dose	Method
Pimephales promelas (fathead minnow)	96h	LC50: 1376 mg/l	OECD 203
Daphnia magna (Water flea)	48h	EC50: 1328 mg/l	OECD 202
Pseudokirchneriella subcapitata	96h	EC50: 225 mg/l (Growth rate)	OECD 201
Pseudomonas putida***	17 h***	EC50: 4390 mg/l***	DIN 38412, part 8***

### **Long term toxicity**

#### **Butan-1-ol (71-36-3)**

Type	Species	Dose	Method	
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**Emergency telephone number**  
11 / 16

NCEC +1 202 464 2554  
USA (A-US)

# SAFETY DATA SHEET



**n-Butanol**  
**10420**

**Version / Revision** 4.01

Reproductive toxicity	Daphnia magna (Water flea)	NOEC: 4,1 mg/l (21d)	OECD 211	
Reproductive toxicity	Daphnia magna (Water flea)	EC50: 18 mg/l/21d	OECD 211	
Aquatic toxicity	Pseudokirchneriella subcapitata	EC10: 134 mg/l (96 h) NOAEC: 129 mg/l (96 h)***	OECD 201 Growth rate	

<b>Terrestrial toxicity</b>				
<b>Butan-1-ol (71-36-3)</b>				
Species	Exposure time	Dose	Type	Method
Lactuca sativa (Lettuce)***	3 d***	EC50: ~ 390 mg/l***	germination***	germination inhibition test***

## 12.2. Persistence and degradability

**Butan-1-ol, CAS: 71-36-3**

### Biodegradation

92 % (15 d), Sewage, aerobic, domestic, non-adapted, BOD.

<b>Abiotic Degradation</b>		
<b>Butan-1-ol (71-36-3)</b>		
Type	Result	Method
Hydrolysis	No data available	
Photolysis	Half-life (DT50): 46 - 53,5 h***	measured***

## 12.3. Bioaccumulative potential

<b>Butan-1-ol (71-36-3)</b>		
Type	Result	Method
log Pow	1 @ 25 °C	OECD 117
BCF	3,16***	calculated***

## 12.4. Mobility in soil

<b>Butan-1-ol (71-36-3)</b>		
Type	Result	Method
Surface tension	69,9 mN/m (1 g/l @ 20°C (68°F))	OECD 115
Adsorption/Desorption	log Koc: 0,54	calculated
Distribution to environmental compartments	Air: 27,07 Soil: 0,04 Water: 72,85 Sediment: 0,04 Suspended sediment: 0 Biota: 0	Calculation according Mackay, Level I***

## 12.5. Results of PBT and vPvB assessment

**Emergency telephone number**  
12 / 16

NCEC +1 202 464 2554  
USA (A-US)

# SAFETY DATA SHEET



n-Butanol  
10420

Version / Revision 4.01

## Butan-1-ol, CAS: 71-36-3

### **PBT and vPvB assessment**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT), nor very persistent nor very bioaccumulating (vPvB)

### **12.6. Other adverse effects**

#### Butan-1-ol, CAS: 71-36-3

No data available

## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

#### **Product Information**

Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal.

#### **Uncleaned empty packaging**

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

## **SECTION 14: Transport information**

### D.O.T. (49CFR)

<b>14.1. UN number</b>	UN 1120
<b>14.2. UN proper shipping name</b>	Butanols
<b>14.3. Transport hazard class(es)</b>	3
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	no
<b>14.6. Special precautions for user</b>	
Reportable Quantity (RQ)	5000 lb/ 2270 kg (1-Butanol)
Emergency Response Guide	129

### ICAO-TI / IATA-DGR

<b>14.1. UN number</b>	UN 1120
<b>14.2. UN proper shipping name</b>	Butanols
<b>14.3. Transport hazard class(es)</b>	3
<b>14.4. Packing group</b>	III

# SAFETY DATA SHEET



n-Butanol  
10420

Version / Revision 4.01

14.5. Environmental hazards no  
14.6. Special precautions for user no data available

## IMDG

14.1. UN number UN 1120  
14.2. UN proper shipping name Butanols  
14.3. Transport hazard class(es) 3  
14.4. Packing group III  
14.5. Environmental hazards no  
14.6. Special precautions for user  
EmS F-E, S-D

## 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Product name n-Butyl alcohol  
Ship type 3  
Pollution category Z

## SECTION 15: Regulatory information

### Federal and State Regulations

Components of the product are listed in the quoted regulations. For details please refer to the regulations directly. This list is not exhaustive, please check for other applicable regulations.

#### Federal Regulations

This product is listed on the TSCA inventory

#### Section 313 Supplier Notification

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

Component	CAS-No	Concentration (%)
Butan-1-ol	71-36-3	> 99,80

This information must be included in all SDSs that are copied and distributed for this material.

#### Butan-1-ol, CAS: 71-36-3

CERCLA Hazardous Substance  
CERCLA RQ 5000 LBS  
EPCRA SARA Title III 313  
de minimis concentration 1.0 %

#### State Regulations

#### Butan-1-ol, CAS: 71-36-3

# SAFETY DATA SHEET



**n-Butanol**  
**10420**

**Version / Revision** 4.01

CA Hazardous Substances (Director's) List  
IL Chemical Safety Act  
MA Hazardous Substances List  
MA RTK List  
MN Hazardous Substances List  
NJ RTK List  
NY Hazardous Substances List  
NY RTK List  
PA RTK List  
RI RTK List

## International Inventories

### **Butan-1-ol, CAS: 71-36-3**

AICS (AU)  
DSL (CA)  
IECSC (CN)  
EC-No. 2007516 (EU)  
ENCS (2)-3049 (JP)  
ISHL (2)-3049 (JP)  
ISHL 2-(8)-299 (JP)  
KECI KE-03867 (KR)  
INSQ (MX)  
PICCS (PH)  
TSCA (US)  
NZIoC (NZ)  
TCSI (TW)

## **SECTION 16: Other information**

**Revision Date** 26-Jan-2021  
**Issuing date** 26-Jan-2021

### Hazard Rating Systems

#### **NFPA (National Fire Protection Association)**

Health Hazard	2
Fire Hazard	3
Reactivity	0

#### **HMIS (Hazardous Material Information System)**

Health Hazard	2
Flammability	3
Physical Hazard	0

### **Training advice**

For effective first-aid, special training / education is needed.

### **Sources of key data used to compile the datasheet**

Information contained in this safety data sheet is based on OQ owned data and public sources deemed valid or

# SAFETY DATA SHEET



**n-Butanol**  
**10420**

**Version / Revision** 4.01

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acceptable. The absence of data elements required by OSHA, ANSI or Annex II, Regulation 1907/2006/EC indicates, that no data meeting these requirements is available.

### **Further information for the safety data sheet**

Changes against the previous version are marked by \*\*\*. Observe national and local legal requirements. For more information, other material safety data sheets or technical data sheets please consult the OQ homepage ([www.chemicals.oq.com](http://www.chemicals.oq.com)).

The use of a comma in section 3 and section 7 to 12 is the same as a period.

### **Disclaimer**

**For industrial use only.** The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. OQ makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.

**End of Safety Data Sheet**