

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Trade name : Technical butan-1-ol

Chemical name : butan-1-ol  
CAS-No : 71-36-3  
EC-No : 200-751-6  
Registration number : 01-2119484630-38-0012

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

Use of the Substance/ Mixture : Industrial uses: as intermediate, in formulation and (re)packing of substances and mixtures, distribution, in coatings (paints, ink, toners, adhesives), in cleaning agents, in lubricants, in metal working fluids / rolling oils.  
Professional uses: distribution, in coatings (paints, ink, toners, adhesives), in cleaning agents, in lubricants, in metal working fluids / rolling oils, in laboratories.  
Consumer uses: in coatings (paints, ink, toners, adhesives), in cleaning agents, in lubricants, in metal working fluids / rolling oils.  
See complete list in the exposure scenario provided as an annex.

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

Company : Nevinomyssky Azot JSC  
1 Nizyaeva str., Nevinnomysk, Stavropol Territory, 357107, Russia

Telephone : + 7 (86554) 4-42-65

E-mail address : nevinazot@eurochem.ru

Only representative : AB "Lifosa"  
Juodkiskio 50, LT-57502 Kedainiai, Lithuania

Telephone : + (370 347) 66 483

E-mail address : info@lifosa.com

#### 1.4 Emergency telephone number

**Austria:** Poison Control Centre, Tel.: (+43)-1-406-43-43;  
**Belgium:** Belgisch Antigifcentrum, Tel.: 070/245-245;  
**Bulgaria:** Многопрофилна болница за активно лечение и спешна медицина "Н.И.Пирогов",  
Tel.: (+359)-2-9154-409;  
**Croatia:** Poison Control Centre, Tel: (+385)-1-23-48-342;  
**Czech Republic:** Toxikologické informační středisko Telefon: (+420)-224-919-293,  
**Denmark:** Poison Control Hotline, Tel.: (+45)-82-12-12-12;

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

**Estonia:** National emergency telephone number: 112 or Poison information telephone number: 16662, calling from abroad: (+372)-626-93-90;  
**Finland:** Poison Information Centre, Tel.: (09)-471-977 (direct) or (09)-4711;  
**France:** ORFILA (INRS): (+33)-(0)-1-45-42-59-59;  
**Hungary:** Az Egészségügyi Toxikológiai Tájékoztató Szolgálat elérhetőségei Tel: (+36)-80-201-199;  
**Latvia:** Valsts Toksikoloģijas centra Saindēšanās un zāļu informācijas centrs, Tel.: (+371)-67042473;  
**Lithuania:** Sveikatos apsaugos ministerijos ekstremalių sveikatai situacijų centras, Tel.: (+370)-5-236-20-52 or (+370)-687-53378;  
**Malta:** Mater Dei Hospital, Tel: 2545-0000;  
**Portugal:** Centro de Informação Antivenenos (Portuguese Poison Centre), Tel: 808-250-143;  
**Romania:** Biroul RSI Si Informare Toxicologica, Tel.: 021-318-36-06 (direct) (8.00 - 15.00);  
**Slovak Republic:** National Toxicological Information Centre (+421)-2-5477-4166; (+420)-224-915-402;  
**Sweden:** 112.

Note: please, consult with your local/national competent authorities for the emergency number in your country.

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### Classification according to REGULATION (EC) No 1272/2008

Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Acute toxicity (oral), Category 4	H302: Harmful if swallowed.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye damage, Category 1	H318: Causes serious eye damage.
Specific target organ toxicity, single exposure, Category 3	H335: May cause respiratory irritation.
	H336: May cause drowsiness or dizziness.

### 2.2 Label elements

#### Labeling according to REGULATION (EC) No 1272/2008

Hazard pictogram (s) :



GHS02: flame



GHS05: corrosion



GHS07: exclamation mark

Signal Word : Danger

Hazard statements	:	H226	Flammable liquid and vapour.
	:	H302	Harmful if swallowed.
	:	H315	Causes skin irritation.
	:	H318	Causes serious eye damage.
	:	H335	May cause respiratory irritation.
	:	H336	May cause drowsiness or dizziness.

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

Precautionary statements : **Prevention:**  
P210 : Keep away from heat, sparks, open flames, hot surfaces. – No smoking.  
P233 : Keep container tightly closed.  
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.  
P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Storage:**  
P403 + P235 : Store in a well-ventilated place. Keep cool.

All precautionary statements see Section 16.

### 2.3 Other hazards

The substance does not fulfil the PBT criteria (not PBT) and not the vPvB criteria (not vPvB).

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

The product is a chemical substance within the meaning of the REACH Regulation (1907/2006/EC). The following table contains the main constituent at the top.

Chemical Name	Concentration, wt. %	CAS-No	EC-No / Registration number	Index-No	CHS
butan-1-ol	≤ 100	71-36-3	200-751-6 / 01-2119484630-38-0012	603-001-00-X	Flam.Liq.3, H226; Acute.Tox4, H302; STOT SE 3, H335; Skin Irrit.2, H315; Eye.Dam.1, H318; STOS SE 3, H336

For the full text of the H-phrases mentioned in this Section, see Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). First aider needs to protect himself. Move out of dangerous area. Never give anything by mouth to an unconscious person. Take off contaminated clothing and shoes immediately.

Inhalation : If breathed in, move person into fresh air. Keep patient warm and at rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Immediately consult a physician.

Skin contact : In case of contact, immediately flush skin with soap and plenty of water. Immediately consult a physician.

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

Eye contact : Protect unharmed eye. If easy to do, remove contact lens, if worn. Rinse thoroughly with plenty of water for at least 15 minutes and immediately consult a physician.

Ingestion : Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Rinse mouth with water. Consult a physician.

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

Ingestion may cause drowsiness or dizziness.

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

No data available.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1 Extinguishing Media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet.

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

Specific hazards : Hazardous decomposition products may be formed under fire conditions (see section 10). Exposure to decomposition products may be a hazard to health.

### 5.3 Advice fire fighters

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information : Standard procedure for chemical fires. Use spray water to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedure

Refer to protective measures listed in sections 7 and 8. Use personal protective equipment. Remove all sources of ignition. Avoid contact with skin and eyes. Avoid inhalation of vapour, spray or mist. Ensure adequate ventilation, especially in confined areas. Immediately evacuate personnel to safe areas. Vapours can accumulate in low areas.

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

### 6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. Avoid re-release to the environment. Refer to special instructions.

### 6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations. Clean contaminated surface thoroughly.

### 6.4 Reference to other sections

See Section 7, 8, 11, 12 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8. Avoid contact with skin and eyes. Keep away from sources of ignition – No smoking. Keep away from combustible material. Avoid inhalation of vapor, mist or spray. Prevent the creation of flammable or explosive concentrations of vapour in air. Take precautionary measures against static discharges. Use appropriate container to avoid environmental contamination. Do not carry cloths that have come into contact with the product in your clothing. Handle with care. Avoid exposure - obtain special instructions before use.

Advice on protection against fire and explosion : Normal measures for preventive fire protection. Keep away from heat and sources of ignition.

### 7.2 Conditions for safe storage including any incompatibilities

Requirements for storage areas and containers : Store in a place accessible by authorized persons only. Keep locked up or in an area accessible only to qualified or authorized persons. Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in containers (tanks) of carbon steel.

Advice on common storage : Keep away from food, drink and animal feeding stuffs. Incompatible with acids and bases. Do not store together with oxidizing, combustible substances and materials.

Storage period : 36 months.

### 7.3 Specific end use(s)

See Annex I.

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

Components	CAS-No	Control parameters	Basis	Country
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ; STEL: 800 ppm, 1040 mg/m <sup>3</sup>	OEL-AT	Austria
Butan-1-ol	67-56-1	TWA: 200 ppm, 266 mg/m <sup>3</sup> ; STEL: 250 ppm, 333 mg/m <sup>3</sup>	MB 14.3.2002	Belgium
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	НАРЕДБА № 13	Bulgaria
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	OEL-HR	Croatia
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	OEL-CY	Cyprus
Butan-1-ol	67-56-1	TWA: 250 mg/m <sup>3</sup>	361/2007 Sb.	Czech Republic
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	OEL-DK	Denmark
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ; STEL: 250 ppm, 350 mg/m <sup>3</sup>	RT I 2001, 77, 460	Estonia
Butan-1-ol	67-56-1	TWA: 200 ppm (restrictive limit), 260 mg/m <sup>3</sup> (restrictive limit); STEL: 1000 ppm, 1300 mg/m <sup>3</sup> ;	ED984	France
Butan-1-ol	67-56-1	TWA: 200ppm, 270 mg/m <sup>3</sup> ; STEL: 250 ppm, 330 mg/m <sup>3</sup>	HTP-ARVOT 2014	Finland
Butan-1-ol	67-56-1	MAK(TWA): 200 ppm, 270 mg/m <sup>3</sup>	TRGS 900	Germany
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	LN. 2003/035	Gibraltar
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ; STEL: 250 ppm, 325 mg/m <sup>3</sup> ;	OEL-GR	Greece
Butan-1-ol	67-56-1	TWA: 200 ppm;	EüM-SzCsM 25/2000	Hungary
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ; STEL: 600 ppm (calculated), 780 mg/m <sup>3</sup> (calculated);	S.I. No. 619 of 2001	Ireland
Butan-1-ol	67-56-1	TWA: 200 ppm, 262 mg/m <sup>3</sup> ; STEL: 250 ppm, 328 mg/m <sup>3</sup>	OEL-IT	Italy
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	MK 01.02.2011. Nr.92	Latvia
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	2011 m. 1 d. Nr. V-824/A1-389	Lithuania
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	Mémorial 168	Luxembourg
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	S.L.424.24	Malta
Butan-1-ol	67-56-1	TWA: 100 ppm, 133 mg/m <sup>3</sup>	OEL-NL	Netherlands
Butan-1-ol	67-56-1	TWA: 100 mg/m <sup>3</sup> ; STEL: 300 mg/m <sup>3</sup>	Dz.U. 2014 poz. 817	Poland
Butan-1-ol	67-56-1	TWA: 200 ppm (indicative limit value), 266 mg/m <sup>3</sup> (indicative limit value); STEL: 250 ppm	OEL-PT	Portugal
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ; STEL: 5 ppm	Hotarârea nr. 1218	Romania
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	Nariadenie 300/2007 Z.z.	Slovak Republic
Butan-1-ol	67-56-1	TWA: 200 ppm, 260 mg/m <sup>3</sup> ;	OEL-SI	Slovenia
Butan-1-ol	67-56-1	TWA: 200 ppm (indicative limit value), 266 mg/m <sup>3</sup> (indicative limit value);	OEL-ES	Spain
Butan-1-ol	67-56-1	LLV: 200 ppm, 250 mg/m <sup>3</sup> ; STV: 250 ppm, 350 mg/m <sup>3</sup>	AFS 2011:18	Sweden
Butan-1-ol	67-56-1	TWA: 200 ppm, 266 mg/m <sup>3</sup> ; STEL: 250 ppm, 333 mg/m <sup>3</sup>	EH40/2005	United Kingdom

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

### **PNEC (Predicted No effect Concentration)**

PNEC aqua – freshwater	: 0,082 mg/l
PNEC aqua – marine water	: 0,0082 mg/l
PNEC aqua – intermittent releases	: 2,25 mg/l
PNEC sediment (freshwater)	: 0,178 mg/kg dw
PNEC sediment (marine water)	: 0,0178 mg/kg dw
PNEC soil	: 0,015 mg/kg soil dw
PNEC STP	: 2.476 mg/l

### **DNEL (Derived No Effect Level)/DMEL (Derived Minimal Effect Level)**

#### Worker:

Long -term exposure local effects, inhalation : 310 mg/m<sup>3</sup>

#### General population:

Long -term exposure systemic effects, oral : 3,125 mg/kg bw/day  
Long -term exposure local effects, inhalation : 55 mg/m<sup>3</sup>

## **8.2 Exposure controls**

### **Engineering measures**

Provide sufficient air exchange and/or exhaust in work rooms. Highly effective exhaust ventilation.

### **Personal protective equipment**

Respiratory protection : Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination 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.

Remarks : Use respirators and components tested and approved under appropriate government standards CEN (EU).

#### Hand protection

Material : Butyl-rubber.

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

Eye protection : Tightly fitting safety goggles. Face shield.

Remarks : Use equipment for eye protection tested and approved under appropriate government standards such as EN 166 (EU).

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.  
General industrial hygiene practice.  
Avoid breathing vapours, mist or spray.  
Avoid contact with skin, eyes and clothing.  
When using do not eat, drink or smoke.  
Wash hands before breaks and at the end of workday.  
Follow the skin protection plan.  
Wash contaminated clothing before re-use.

### Environmental exposure controls

See Annex I

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Form : Liquid  
Colour : Colourless  
Odour : No data available.  
Odor threshold : No data available.  
Flash point : 35 °C at 1013 hPa  
Method: MP EN22719A/ISO2719A, closed cup  
Lower explosion limit : No data available.  
Upper explosion limit : No data available.  
Explosive properties : Non explosive. There are no chemical groups associated with explosive properties present in the molecule.  
Flammability : Flammable.  
Oxidizing properties : Non oxidising. The substance is incapable of reacting exothermically with combustible materials on the basis of the chemical structure.  
Self-ignition temperature : 355 °C at 1.013 hPa  
Melting point/range : < (- 90) °C  
pH : Not applicable.  
Boiling point/boiling range : 119 °C at 1.013 hPa  
Vapor pressure : < 10 kPa at 20 °C  
Density : 0,81 g/cm<sup>3</sup> at 20 °C  
Bulk density : Not applicable.  
Water solubility : 0,66 g/cl at 20 °C.  
Miscibility with water (15 °C) : At any ratio (> 90%)  
Partition coefficient: n-octanol/water : 1,0 at 25°C  
Solubility in other solvents : No data available.  
Viscosity, dynamic : 2,947 mPa·s at 20 °C  
Viscosity, kinematic : No data available.  
Relative vapor density : No data available.  
Evaporation rate : No data available.  
Decomposition temperature : No data available.



# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

### 9.2 Other information

Molecular weight : 74,12 g/mol  
Surface tension : 69,9 mN/m at 20° C

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Vapours may form explosive mixtures with air.

### 10.4 Conditions to avoid

Heat, flame and sparks.

### 10.5 Incompatible materials

Materials to avoid : Acids, bases, oxidizing, combustible substances and materials.

### 10.6 Hazardous decomposition products

Hazardous decomposition products : Build-up of dangerous/toxic fumes possible in cases of fire/high temperature:  
Carbon oxides.

Thermal decomposition : No data available.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Acute oral toxicity

Butan-1-ol : LD<sub>50</sub> (rat) 2.290 mg/kg

##### Acute inhalation toxicity

Butan-1-ol : LC<sub>50</sub> (rat) 17.760 mg/m<sup>3</sup>  
Exposure time: 4 h

##### Acute dermal toxicity

Butan-1-ol : LD<sub>50</sub> (rabbit): 3.434 mg/kg

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

### Acute toxicity (other routes of administration)

No data available

### **Skin corrosion / irritation**

Skin irritation : Causes skin irritation.

### **Serious eye damage / eye irritation**

Eye irritation : Causes serious eye damage.

### **Sensitization of the respiratory / skin**

Skin sensitization : Non skin sensitizing

Respiratory sensitization : Non respiratory sensitizing

### **Mutagenicity**

No mutagenic effect.

### **Carcinogenicity**

No carcinogenic effect.

### **Reproductive toxicity**

No reproductive effect.

### **Teratogenicity**

No data available

### **Specific target organ toxicity after single exposure**

Vapours may cause drowsiness and dizziness. May cause respiratory irritation.

### **Specific target organ toxicity after repeated exposure (sub-acute / sub-chronic)**

Repeated dose toxicity: (sub-acute/ sub-chronic)

No data available.

### **Aspiration hazard**

No data available.

### **Neurological effects**

Butan-1 -ol does not exhibit selective or cumulative neurotoxicity in laboratory animals.

### **Toxicology, metabolism, distribution**

Absorption: ready absorption through the skin, intestinal tract and lungs.

Metabolism: primarily performed by alcohol and aldehyd dehydrogenases.

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1 Toxicity

##### Toxicity to fish:

Butan-1-ol : LC<sub>50</sub> (Pimephales promelas): 1.376 mg/l  
Exposure time: 96 h

##### Toxicity to daphnia and other aquatic invertebrates:

Butan-1-ol : EC<sub>50</sub> (Daphnia magna): > 1.328 mg/l  
Exposure time: 48 h

##### Toxicity to aquatic plants:

Butan-1-ol : IC<sub>50</sub> (Pseudokirchnerella subcapitata): > 500 mg/l  
Exposure time: 96 h

##### Long-term study daphnia and other aquatic invertebrates

Butan-1-ol : NOEC (Daphnia magna): 4,1 mg/l  
Exposure time: 21 days

#### 12.2 Persistence and degradability

Biodegradability : Readily biodegradable.

#### 12.3 Bioaccumulation potential

Butan-1-ol : BCF: 3,16

#### 12.4 Mobility in soil

Adsorption to solid soil phase is not expected.

#### 12.5 Results of PBT assessment and vPvB

The substance does not fulfil the PBT criteria (not PBT) and not the vPvB criteria (not vPvB).

#### 12.6 Other adverse effects

Adsorbed organic bound halogens (AOX) : Not included

Additional ecological information : The product should not be allowed to enter drains, water courses or the soil.

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Advice on disposal and packaging : Disposal:  
In accordance with local and national regulations. Do not dispose of waste into sewer. This material and its container must be disposed of in a safe way. Do not dispose of together with household waste. Waste codes should be assigned by the user based on the application for which the product was used.

### SECTION 14: TRANSPORT INFORMATION

#### ADR

UN-Number : 1120  
Description of the goods : BUTANOLS  
Class : 3  
Packing group : III  
Classification Code : F1  
Hazard identification No : 30  
Labels : 3  
Limited quantity : LQ7  
Tunnel restriction code : D/E  
Environmentally hazardous : no

#### RID

UN-Number : 1120  
Description of the goods : BUTANOLS  
Class : 3  
Packing group : III  
Classification Code : F1  
Hazard identification No : 30  
Labels : 3  
Limited quantity : LQ7  
Environmentally hazardous : no

#### IATA

UN-Number : 1120  
Description of the goods : Butanols  
Class : 3  
Packing group : III  
Labels : 3  
Packing instruction (cargo aircraft) : 366  
Environmentally hazardous : no  
Packing instruction (passenger aircraft) : 355  
Packing instruction (LQ) : Y344

#### IMDG

UN-Number : 1120  
Description of the goods : BUTANOLS  
Class : 3  
Packing group : III  
Labels : 3  
EmSNumber 1 : F-E

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

EmS Number 2 : S-D  
Marine pollutant : no

### Special precautions for the user

See Section 6, 7 and 8

## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture

Special labelling of certain : Restricted to professional users.  
mixtures

Seveso Directive (2012/18/EU)	:	Quantity 1	Quantity 2
	P5c Flammable liquids	5.000 t	50.000 t

### 15.2 CSA

The Chemical Safety Assessment was undertaken.

## SECTION 16: OTHER INFORMATION

### Hazard statements:

H226 : Flammable liquid and vapour.  
H302 : Harmful if swallowed.  
H315 : Causes skin irritation.  
H318 : Causes serious eye damage.  
H335 : May cause respiratory irritation.  
H336 : May cause drowsiness or dizziness.

### Precautionary statements:

#### **Prevention:**

P240: Ground or bond container and receiving equipment.  
P241: Use explosion-proof electrical, ventilating, lighting equipment.  
P242: Use only non-sparking tools.  
P243: Take precautionary measures against static discharge.  
P261: Avoid breathing vapours.  
P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P271: Use only outdoors or in a well-ventilated area.

#### **Response:**

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.  
P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P310: Immediately call a POISON CENTER or doctor.  
P321: Specific treatment (see on this label).  
P330: Rinse mouth.

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006, Regulation (EU) No 2015/830, Regulation (EC) No 1272/2008

## Technical butan-1-ol

Revision Date 27.08.2015

Version 3.0

EU / EN

P332+P313: If skin irritation occurs: Get medical advice and attention.

P362: Take off contaminated clothing and wash before reuse.

P370+P378: In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinction.

### **Storage:**

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

### **Disposal:**

P501: Dispose of contents and container to in accordance with national regulation.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

## ANNEX I: EXPOSURE SCENARIOS