

# Safety Data Sheet

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Revision Date: 23.11.2022 Version 2

# TEKKİM

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Catalog No. TK.930124.00000  
Product Name Butanol (Sec-Butanol)  
Cas no 78-92-2

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

#### 1.2.1. Relevant identified uses

Industrial use. Use as a laboratory reagent.

#### 1.2.2. Uses advised against

No information available.

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

Name TEKKİM KİMYA SAN. TİC. LTD. ŞTİ.  
Street ORGANİZE SAN. BÖL. MAVİ CAD. 8. SOK. NO :1 NİLÜFER / BURSA  
Telephone 0224 243 21 71  
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Company Representative Erhan DİLER

**1.4 Emergency Telephone Number +90 506 990 36 86**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Flammable liquids (Category 3), H226

Eye irritation (Category 2), H319

Specific Target Organ Toxicity – Single exposure, Category 3, Central nervous system

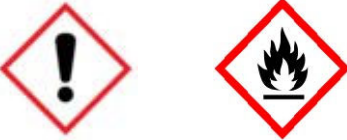
Specific Target Organ Toxicity – Single exposure, Category 3, Respiratory system

For the full text of the H and EUH statements referred to in this section, see section 16.

### 2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

Hazard pictograms



Signal word (SEA)

WARNING

Hazard Statements (SEA)

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.


H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

Precautionary Statements (SEA)



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## Prevention

- P210 Keep away from heat/sparks/open flames/hot surfaces. -No smoking.  
P233 Keep container tightly closed.  
P240 Ground/connect container or receiving equipment.  
P241 Use explosion-proof electrical/ventilation/igniter/.../ material.  
P242 Use only non-flammable tools.

## Intervention

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if fitted and easy to do. Continue rinsing.

## SECTION 3: Composition/information on ingredients

Classification according to Regulation (EC) No. 1272/2008 (CLP)

### 3.1 Maddeler

EC No	201-158-5
Molar mass	74.12 g/mol
Cas No	78-92-2
Concentration	(<= 100 % )

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<i>General information</i>	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
<i>Following inhalation</i>	Remove casualty to fresh air and keep warm and at rest..
<i>Following skin contact</i>	Wash with plenty of water. Take off contaminated clothing.
<i>Following eye contact</i>	In case of contact with eyes, rinse immediately with plenty of water and consult an ophthalmologist.
<i>Following ingestion</i>	Give up to two glasses of water. Get medical help immediately.

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

The most important known symptoms and effects are described in the labelling

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

No information available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

*Suitable extinguishing media*

Foam. Dry extinguishing powder. Carbon dioxide (CO2).

*Unsuitable extinguishing media*

There is no restriction for this item.

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

Carbon oxides. Flammable. Heavy-than-air vapors may form on the floor surface. Forms explosive mixtures with air at elevated temperatures. In case of fire, dangerous flammable gases or vapors may develop.

### 5.3 Advice for firefighters

*Special protective equipment for firefighters*

In case of fire: Wear self-contained breathing apparatus..

### 5.4 Additional information

Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control.

## SECTION 6: Accidental release measures

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



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Advice for non-emergency personnel: Don't breathe vapours, aerosols. Avoid substance contact. Keep away from head and source of ignition. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert..

## 6.2 Environmental precautions

Do not discharge into sewer. Risk of explosion.

## 6.3 Methods and material for containment and cleaning up

Close drainage channels. Take up with liquid-absorbent material. Clean the affected area.

## 6.4 Reference to other sections

Disposal: see section 13.

## 6.5 Additional information

Clear spills immediately.

## SECTION 7: Handling and Storage

### 7.1 Precautions for safe handling

*Advices on safe handling*

Observe label precautions. Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

*Advices on general occupational hygiene*

Change contaminated clothing. Wash hands after working with substance.

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

*Storage conditions*

Do not use light weight metal containers. Keep container tightly closed in dry and well-ventilated places. Keep away from heat and anything that can cause ignition.

### 7.3 Specific end uses

There are no other specific uses other than those mentioned in section 1.2.

## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Appropriate engineering controls

More attention should be paid to technical measures against the use of personal protective equipment.

#### Personal protection equipment

*Eye/face protection*

Safety glasses

*Hand protection*

Hand protection

in full contact

Glove material : Nitrile rubber

Glove thickness: 0.4 mm

Absorption time: > 480 minutes

In contact with splash

Glove material : Chloroprene

Glove thickness: 0.65 mm


Absorption time: > 120 minutes

The gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resulting standard EN374.

*Other skin protection*



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Flame retardant antistatic protective clothing.

## Respiratory protection

Required when vapors/aerosols are generated.

Recommended Filter type: Filter A (according to DIN 3181), for vapors of organic compounds.

## SECTION 9: Physical and chemical Properties

### 9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	Colorless
Odour	No information.
Odour threshold	43 ppm
pH value	No information.
Melting point/freezing point	-115 °C
Freezing point	No information.
Initial boiling point and boiling range	99 - 102 °C
Flash point	27 °C
Evaporation rate	No information.
Flammability (solid, gas)	No information.
Upper/lower flammability or explosive limits	1,7 %(V)
Upper/lower flammability or explosive limits	9,8 %(V)
Vapour pressure	16,5 hPa 20 °C
Vapour density	2,6
Density	0,81 g/cm <sup>3</sup> 20 °C
Relative density	No information.
Water solubility (g/l)	Soluble.
Fat solubility (g/l)	No information.
Partition coefficient: n-octanol/water	log Pow: 0,146
Auto-ignition temperature	No information.
Decomposition temperature	No information.
Viscosity	
Kinematic viscosity	No information.
Dynamic viscosity	4,21 mPa.s 20 °C
Explosive properties	Not classified as explosive.
Oxidising properties	none

## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

Vapor/air mixtures are explosive if overheated.

### 10.2 Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3 Possibility of hazardous reactions

It can react exothermically with alkali metals, alkaline earth metals, strong oxidizing agents, strong reducing agents, aluminum, acid halides, chromium (VI) oxide.

### 10.4 Conditions to avoid

In case of warming.

### 10.5 Incompatible materials

Aluminum, rubber, various plastics.

### 10.6 Hazardous decomposition products


No known hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects



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Acute oral toxicity  
LD50 Oral - Rat - male and female - 2.193 mg/kg  
(OECD Testing Guide 423)

Acute respiratory toxicity  
LC50 Inhalation - Rat - 4 h - 48.5 mg/l  
(RTECS)

Acute dermal toxicity  
LD50 Dermal - Rat - male and female - > 2.000 mg/kg  
(OECD Testing Guide 402)

Serious eye damage/eye irritation  
Eyes - Rabbit  
Result: Eye irritation  
(OECD Testing Guide 405)

## 11.2 Additional information

Handle in accordance with good industrial hygiene and safety practice

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish  
static test LC50 - Leuciscus idus melanotus - 3,520 mg/l - 48 h  
(ECHA)

Toxicity to daphnia and other aquatic invertebrates  
static test EC50 - Daphnia magna (Water flea) - 2.300 mg/l - 24 h  
(ECHA)

### 12.2 Persistence and degradability

Biodegradability  
oxygenated (aerobic) - Exposure time 5 d  
Result: 86 % - Easily degradable.  
(ECHA)

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

Substance does not meet the criteria for PBT or vPvB.

### 12.6 Other adverse effects

Discharge into environment must be avoided.

## SECTION 13: Disposal considerations

### Waste treatment methods


It must be disposed of in accordance with national and local regulations. Do not mix with other products. Uncleaned Treat packages as if it were the product itself ... Waste materials must be disposed of in accordance with national and local regulations.

## SECTION 14: Transport information

ADR	IMDG	IATA	ADN	RID
<b>14.1 UN number</b> UN 1120	UN 1120	UN 1120	UN 1120	UN 1120
<b>14.2 UN proper shipping name</b> BUTANOLS	BUTANOLS	BUTANOLS	BUTANOLS	BUTANOLS



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## 14.3 Transport hazard class(es)

3 3 3 3 3



## 14.4 Packing group

II II II II II

## 14.5 Environmental hazards

NO NO NO NO NO

No information available.

No information available.

No information available.

No information available.

No information available.

## 14.6 Special Precautions for User:

No information available.

## SECTION 15: Regulatory information

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

This product safety data sheet complies with the requirements of EU Regulation 1907/2006.

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been conducted for this substance.

## SECTION 16: Other informations

### Full text of H statements

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

## Person Who Prepared the Safety Data Sheet:

Name:

Certificate Number and Date:

Communication information:


Erhan DİLER

11.29.03 & 11 Şubat 2020

05069903686



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