

Safety Data Sheet

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



Revision date 24.10.2019

Print date 24.10.2019

Version

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

1.1 Product identifier

1.2 Relevant identified uses of the substance or mixture and uses advised against TK.930124
Generic name 2-Butanol (sec-Butanol) Extra Pure
REACH No.
CAS No. 78-92-2

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

Relevant identified uses Use as laboratory reagent.
Use of the substance / mixture
Uses advised against

Details of the supplier of the safety data sheet

Name TEKKİM KİMYA SAN. T.C. LTD. ŞTİ.
Street ORGANİZE SAN. BÖL. M
Telephone 0224 243 21 71
E-mail tekkim@tekkim.com.tr
Company Representative Gökhan ÖZKAN

Emergency Telephone Number 0553 209 14 16 - 0553 209 14 18

SECTION 2: Hazards identification

Classification of the substance or mixture

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

Flam. Liq. 3

Specific target organ toxicity (single exposure)

Full text of R-, H- and EUH-phrases: see section 16.

Safety Data Sheet

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

Article No (user) TK.930124
Generic name 2-Butanol (sec-Butanol) Extra Pure

2.2 Label elements

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

Hazard pictograms



Signal word

Warning

Hazard Statements

H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
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.

Response

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.

Storage

2.3 Other hazards

SECTION 3: Composition/information on ingredients

Substances

Formula CH₃CH(OH)CH₂CH₃ C₄H₁₀O (Hill)

EC No. 201-158-5

Molar mass 74,12 g/mol

<u>Characteristic</u>	<u>CAS No</u>	<u>EC No</u>	<u>Concentration</u>	<u>Classification</u>
2-Butanol (sec-Butanol) Extra Pure	78-92-2	201-158-5		;4:H2264:H3194:H3354:H336

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

Description of first aid measures

General information	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible)..
Following inhalation	Remove casualty to fresh air and keep warm and at rest..
Following skin contact	Subsequently wash off with..
Following eye contact	In case of contact with eyes, rinse immediately thoroughly with plenty of edible oil and consult an ophthalmologist..
Following ingestion	Please give up to two glasses of water. Get immediate medical attention..

Safety Data Sheet

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

Article No (user) TK.930124
Generic name 2-Butanol (sec-Butanol) Extra Pure

Most important symptoms and effects, both acute and delayed

The following symptoms may occur: Cough. Anaesthetic state. Dizziness. Dyspnoea.

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

Water spray jet.

5.2 Special hazards arising from the substance or mixture

Flammable. Heavy vapors in the air at the ground surface may occur.. It can create explosive mixtures with air on intense heating. In case of fire hazardous combustion gases or vapors may occur..

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

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 allow to enter into surface water or drains..

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.

Measures to prevent fire

Safety Data Sheet

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

Article No (user) TK.930124
Generic name 2-Butanol (sec-Butanol) Extra Pure

Advices on general occupational hygiene

.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

.

7.3 Specific end uses

.

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

Fresh air (open windows and doors) is necessary..

Personal protection equipment

Eye/face protection

Safety glasses

Hand protection

Full contact

Glove material : Nitrile rubber

Glove thickness : 0,11 mm

Break through time : >480 minute

Splash contact :

Glove material : Nitrile rubber

Glove thickness : 0,11 mm

Break through time : >480 minute

The protective gloves to be used must comply with the specifica

Other skin protection

Protective chlothing

Respiratory protection

Required when vapours are generated

Recommended filter type :

Filter P 1 for solid particles of inert materials (according to DIN 3181)

Environmental exposure controls

See section 7. Additional information about obligations under the common European environment protection regulations:..

SECTION 9: Physical and chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid
Colour	colourless

Safety Data Sheet

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

Article No (user) TK.930124
Generic name 2-Butanol (sec-Butanol) Extra Pure

Odour	Alcohol
Odour threshold	no information
pH value	at 20 °C nötr 0 g/l
Melting point/freezing point	-115 °C
Freezing point	
Initial boiling point and boiling range	99 - 102 °C at 1.013 hPa
Flash point	24 °C
Evaporation rate	no information
Flammability (solid, gas)	°C
Upper/lower flammability or explosive limits	1,4 %(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 ³ 20 °C
Relative density	no information
Water solubility (g/l)	125 g/l at 20 °C °C
Fat solubility (g/l)	no information °C
Partition coefficient: n-octanol/water	log Pow: 0.61 (experimental) (Lit.) Bioaccumulation is not expected.
Auto-ignition temperature	no information
Decomposition temperature	no information
Viscosity	
Kinematic viscosity	4,21 mPa.s at 20 °C
Dynamic viscosity	4,21 mPa.s at 20 °C
Explosive properties	Not classified as explosive.
Oxidising properties	none

SECTION 10: Stability and Reactivity

10.1 Reactivity

Vapours may form explosive mixtures with air. Section 10.3 to see.

10.2 Chemical stability

The product is stable under storage at normal ambient temperatures..

10.3 Possibility of hazardous reactions

severe reactions.

Alkali metals, Alkaline earth metals, Strong oxidizing agents, strong reducing agents, Aluminum, acid halides, chromium (VI) oxide

Safety Data Sheet

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

Article No (user) TK.930124
Generic name 2-Butanol (sec-Butanol) Extra Pure

10.4 Conditions to avoid

.

10.5 Incompatible materials

Aluminium. Rubber, various plastics.

10.6 Hazardous decomposition products

No known hazardous decomposition products..

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity
No information

Skin irritation
Not irritation

Eye irritation
Not irritation

11.2 Additional information

Handle in accordance with good industrial hygiene and safety practice

SECTION 12: Ecological information

12.1 Toxicity

LC50 Pimephales promelas (fathead minnow): 3.670 mg / l; 96 h
(ECOTOX Database)

12.2 Persistence and degradability

It can be cleaned in nature.

12.3 Bioaccumulative potential

Bioacumultaion is not expected

12.4 Mobility in soil

No information

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. It was to proceed as their products uncleaned packaging. Atık Maddeler.

SECTION 14: Transport information

Safety Data Sheet

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

Article No (user) TK.930124
Generic name 2-Butanol (sec-Butanol) Extra Pure

Land transport (ADR/RID)

UN number UN 1120
UN proper shipping name BUTANOLS
Transport hazard class(es) 3
Packing group III
Environmental hazards --
Special precautions for yes
Tunnel restriction code D/E

Inland waterway transport (ADN)

Limited quantity (LQ)

Special Provisions

Category

Air transport (ICAO-TI / IATA-DGR)

UN number UN 1120
UN proper shipping name BUTANOLS
Transport hazard class(es) 3
Packing group III
Environmental hazards --
Special precautions for no

Sea transport (IMDG)

UN number UN 1120
UN proper shipping name BUTANOLS
Transport hazard class(es) 3
Packing group III
Environmental hazards yes
Special precautions for yes

SECTION 15: Regulatory information

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

Storage class : 3

Chemical Safety Assessment

.

SECTION 16: Other information

Safety Data Sheet

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

Article No (user) TK.930124
Generic name 2-Butanol (sec-Butanol) Extra Pure

Relevant R-, H- and EUH-phrases (Number and full text)

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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.

Prepared the Document

Name Surname : Gökhan ÖZKAN
Contact Info : 0553 209 14 18
Email Address : gokhan@tekkim.com.tr
Certificate Number: 01.52.05

TEKKİM