

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form	: Substance
Trade name	: 1-Butanol 99.5% Analytical Grade
Chemical name	: butan-1-ol; n-butanol
IUPAC name	: butan-1-ol
EC Index-No.	: 603-004-00-6
EC-No.	: 200-751-6
CAS-No.	: 71-36-3
Product code	: BUTL-10A
Formula	: C ₄ H ₁₀ O

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

Main use category	: Laboratory use
-------------------	------------------

1.3. Details of the supplier of the safety data sheet

Labbox Labware S.L.
Migjorn, 1
08338 Premia de Dalt, Barcelona
España
T +34 937 07 79 70, F +34 937 909 532
info@labbox.com, www.labbox.com

1.4. Emergency telephone number

Emergency number	: +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number. 24 hours a day, 7 days a week
------------------	--

Country/Area	Organisation	Emergency number
United Kingdom	National Poisons Information Service (Belfast Centre). Royal Victoria Hospital. Grosvenor Road BT12 6BA Belfast.	0344 892 0111 Only for healthcare professionals

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
Acute toxicity (oral), Category 4	H302
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

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

Precautionary statements (CLP)

: P210 - Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type

: Mono-constituent

Name	Product identifier	%
1-Butanol	CAS-No.: 71-36-3 EC-No.: 200-751-6 EC Index-No.: 603-004-00-6	100

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: Get medical advice/attention if you feel unwell.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact

: Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Rinse skin with water/shower. Wash contaminated clothing before reuse.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.

First-aid measures after ingestion

: Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects

: May cause drowsiness or dizziness.

Symptoms/effects after inhalation

: May cause respiratory irritation. May cause drowsiness or dizziness.

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO ₂). Water spray.
Unsuitable extinguishing media	: Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Flammable liquid and vapour.
Explosion hazard	: May form flammable/explosive vapour-air mixture.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
------------------	---

For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Do not breathe gas. Avoid contact with skin and eyes.

For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Stop release. Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up	: Take up liquid spill into absorbent material. Collect spillage. On land, sweep or shovel into suitable containers. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	: No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use explosion-proof equipment. Wear personal protective equipment.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.
Storage conditions	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep container tightly closed.
Incompatible materials	: Heat sources.
Storage area	: Store in a well-ventilated place.
Packaging materials	: Always store product in container of same material as original container.

7.3. Specific end use(s)

Laboratory chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

1-Butanol 99.5% Analytical Grade (71-36-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	n-Butyl alcohol
Remark	SCOEL Recommendations (Ongoing)
France - Occupational Exposure Limits	
Local name	Alcool n-butylique
VLEP CT (OEL STEL)	150 mg/m ³
	50 ppm
Remark	Valeurs recommandées/admises
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Butan-1-ol
AGW (OEL TWA)	310 mg/m ³
	100 ppm
Remark	DFG,Y
Portugal - Occupational Exposure Limits	
Local name	n-Butanol (Álcool n-butílico)
OEL TWA	20 ppm
Spain - Occupational Exposure Limits	
Local name	n-Butanol (Alcohol n-butílico)

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

1-Butanol 99.5% Analytical Grade (71-36-3)	
VLA-ED (OEL TWA)	61 mg/m ³
	20 ppm
VLA-EC (OEL STEL)	154 mg/m ³
	50 ppm
United Kingdom - Occupational Exposure Limits	
Local name	Butan-1-ol
WEL STEL (OEL STEL)	154 mg/m ³
	50 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)

DNEL and PNEC

1-Butanol 99.5% Analytical Grade (71-36-3)	
DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	310 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	3,125 mg/kg bodyweight/day
Long-term - local effects, inhalation	55 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0,082 mg/l
PNEC aqua (marine water)	0,0082 mg/l
PNEC aqua (intermittent, freshwater)	2,25 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,178 mg/kg dwt
PNEC sediment (marine water)	0,0178 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,015 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	2476 mg/l

8.2. Exposure controls

Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure. ISO 374-1.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Chemical goggles or safety glasses

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

protective gloves

Respiratory protection

Respiratory protection:

Wear appropriate mask. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

The present safety data sheet is consistent with the specific conditions relied on to justify the registration of the substance in accordance with Article 17 or 18 of the REACH regulation. Do not eat, drink or smoke during use. Wash hands with water as a precaution.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Liquid.
Molecular mass	: 74,12 g/mol
Odour	: alcohol. strong.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: -90 °C
Boiling point	: 116 – 118 °C
Flammability	: Highly flammable liquid and vapour.
Lower explosion limit	: 1,45 vol %
Upper explosion limit	: 11,25 vol %
Flash point	: 35 °C Atm. press.: 1013 hPa
Auto-ignition temperature	: 343 °C
Decomposition temperature	: Not available
pH	: 7 (70 g/l at 20 °C)
Viscosity, kinematic	: 3,177 mm²/s
Viscosity, dynamic	: 2,573 mPa·s 25° C
Solubility	: Miscible with water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Water: 7,3 g/l 25° C
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 5 hPa 20° C
Vapour pressure at 50°C	: Not available
Density	: 0,81 g/cm³ 25° C
Relative density	: Not available
Relative vapour density at 20°C	: 2,6
Particle characteristics	: Not applicable

9.2. Other information

Other safety characteristics

Relative evaporation rate (butylacetate=1)	: 0,46
Refractive index	: 1,399 – 1,4 20° C, 589 nm

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.2. Chemical stability

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks. Avoid contact with hot surfaces.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

1-Butanol 99.5% Analytical Grade (71-36-3)

LD50 oral rat	≈ 2292 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	≈ 3430 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Causes skin irritation.
pH: 7 (70 g/l at 20 °C)
Serious eye damage/irritation : Causes serious eye damage.
pH: 7 (70 g/l at 20 °C)
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation. May cause drowsiness or dizziness.
STOT-repeated exposure : Not classified

1-Butanol 99.5% Analytical Grade (71-36-3)

LOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat
NOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat

Aspiration hazard : Not classified

1-Butanol 99.5% Analytical Grade (71-36-3)

Viscosity, kinematic	3,177 mm ² /s
----------------------	--------------------------

11.2. Information on other hazards

No additional information available

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

1-Butanol 99.5% Analytical Grade (71-36-3)

LC50 - Fish [1]	1376 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	1328 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	225 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	4,1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

1-Butanol 99.5% Analytical Grade (71-36-3)

Persistence and degradability	Rapidly degradable
Biodegradation	98 %

12.3. Bioaccumulative potential

1-Butanol 99.5% Analytical Grade (71-36-3)

Bioaccumulative potential	Low.
---------------------------	------

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties	: Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.
--	--

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Must follow special treatment according to local regulation.
-------------------------	--

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.1. UN number or ID number

UN-No. (ADR)	: UN 1120
UN-No. (IMDG)	: UN 1120
UN-No. (IATA)	: UN 1120
UN-No. (ADN)	: UN 1120
UN-No. (RID)	: UN 1120

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: BUTANOLS
Proper Shipping Name (IMDG)	: BUTANOLS
Proper Shipping Name (IATA)	: Butanols
Proper Shipping Name (ADN)	: BUTANOLS
Proper Shipping Name (RID)	: BUTANOLS
Transport document description (ADR) (ADR)	: UN 1120 BUTANOLS, 3, III, (D/E)
Transport document description (IMDG)	: UN 1120 BUTANOLS, 3, III
Transport document description (IATA)	: UN 1120 Butanols, 3, III
Transport document description (ADN)	: UN 1120 BUTANOLS, 3, III
Transport document description (RID)	: UN 1120 BUTANOLS, 3, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 3
Danger labels (ADR)	: 3
	:



IMDG

Transport hazard class(es) (IMDG)	: 3
Danger labels (IMDG)	: 3
	:



IATA

Transport hazard class(es) (IATA)	: 3
Danger labels (IATA)	: 3
	:



ADN

Transport hazard class(es) (ADN)	: 3
Danger labels (ADN)	: 3
	:



RID

Transport hazard class(es) (RID)	: 3
Danger labels (RID)	: 3

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878



14.4. Packing group

Packing group (ADR)	: III
Packing group (IMDG)	: III
Packing group (IATA)	: III
Packing group (ADN)	: III
Packing group (RID)	: III

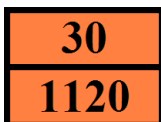
14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Other information	: No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: F1
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T2
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	:



Tunnel restriction code (ADR)	: D/E
EAC code	: •2Y

Transport by sea

Special provisions (IMDG)	: 223
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP1
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Colourless liquids with a disagreeable odour. Explosive limits: normal-BUTANOL 1.4% to 11.2%. secondary-BUTANOL 1.7% to 9.8%. tertiary-BUTANOL 2.4% to 8%. tertiary-BUTANOL solidifies at about 25°C. normal-BUTANOL is immiscible with water. secondary-BUTANOL is immiscible with water. tertiary-BUTANOL is miscible with water. Irritating to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

PCA limited quantity max net quantity (IATA) : 10L
PCA packing instructions (IATA) : 355
PCA max net quantity (IATA) : 60L
CAO packing instructions (IATA) : 366
CAO max net quantity (IATA) : 220L
Special provisions (IATA) : A3
ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : F1
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T2
Portable tank and bulk container special provisions (RID) : TP1
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3.	1-Butanol 99.5% Analytical Grade
3(a)	1-Butanol 99.5% Analytical Grade
3(b)	1-Butanol 99.5% Analytical Grade
40.	1-Butanol 99.5% Analytical Grade

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Council Regulation (EC) for the control of dual-use items

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

Explosives Precursors Regulation (EU 2019/1148)

Not listed on the Explosives Precursors list (EU)

Drug Precursors Regulation (EC 273/2004)

Not listed on the Drug Precursors list (EU)

National regulations

Denmark

- Class for fire hazard : Class II-1
- Store unit : 5 liter
- Classification remarks : R10 <H226;H302;H335;H315;H318;H336>; Emergency management guidelines for the storage of flammable liquids must be followed
- Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Finland

France

Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

- Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 39).

Netherlands

- SZW-lijst van kankerverwekkende stoffen : The substance is not listed
- SZW-lijst van mutagene stoffen : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

1-Butanol 99.5% Analytical Grade

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Poland

Polish National Regulations

: Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488).
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891).
Regulation of the Minister of Health of 25 August 2015 on the method of marking places, pipelines, and containers and tanks used for storing or containing hazardous substances or hazardous mixtures (J.o.L. 2015, item 1368 as amended).

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
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 (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.