

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878.

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

1.1 Product identifier

Product Name: Formlabs Resin Washing Solution

Product code: SLN-RW-01

UFI: 0850-10VN-M002-62XP

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

Relevant identified uses: Wash solvent.

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

1.3 Details of the manufacturer/supplier of the safety data sheet

Manufacturer:

United States

Formlabs, Inc

35 Medford St

Suite 201 Somerville, MA 02143

+1 617 855 0762

sds@formlabs.com

Supplier:

Germany

Formlabs GmbH

Nalepastr. 18

Berlin, . 12459

+49 30 700 146 501

1.4 Emergency telephone number:

European Union

CHEMTREC (EMEA)

+44 20 3885 0382 (24/7)

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture:

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

Eye Irritation, category 2

Hazard-determining components of labeling:

2-(2-butoxyethoxy)ethanol

Additional Information: None

2.2 Label elements

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

Hazard pictograms:



Signal Word: Warning

Hazard statements:

H319 Causes serious eye irritation

Precautionary statements:

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves, protective clothing and eye protection.

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

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P337+P313 If eye irritation persists: Get medical advice/attention.

2.3 Other hazards: None known

SECTION 3: Composition/information on ingredients

3.1 Substance: Not applicable.

3.2 Mixture:

Identification	EU REACH Registration No.	Name	Classification according to Regulation (EC) No. 1272/2008 (CLP)	Weight %
CAS number: 112-34-5 EC number: 203-961-6	-	2-(2-butoxyethoxy)ethanol	Eye Irrit. 2; H319	70-90
CAS number: Trade Secret EC number: Trade Secret	-	Trade Secret	Not classified;	15-30

Additional information: None

Full Text of H and EUH statements: See section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance.

Following inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. If respiratory symptoms develop or persist, seek medical advice/attention.

Following skin contact:

Wash affected area with plenty of soap and water. Remove contaminated clothing and launder before reuse. If skin irritation develops or persists, seek medical advice/attention.

Following eye contact:

Immediately rinse eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. If eye irritation develops or persists, seek medical advice/attention.

Following ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Self-Protection of the first aider:

Not determined or not available.

4.2 Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing.

Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time).

4.3 Indication of any immediate medical attention and special treatment needed

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Specific treatment:

Not determined or not available.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable extinguishing media:

Do not use water jet.

5.2 Special hazards arising from the substance or mixture:

Thermal decomposition may produce irritating/toxic fumes/gases.

5.3 Advice for firefighters

Personal protection equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA).

Special precautions:

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts.

Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers.

Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

6.4 Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages.

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Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

7.3 Specific end use(s):

Refer to Section 1 (Recommended Use).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Bulgaria	2-(2-butoxyethoxy)ethanol	112-34-5	TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	TWA: 308 mg/m ³ ([50 ppm])
Croatia	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	Level Limit Value: 67.5 mg/m ³ (10 ppm)
	Trade Secret	Trade Secret	TWA: 308 mg/m ³ ([50 ppm])
Czech Republic	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 70 mg/m ³
	2-(2-butoxyethoxy)ethanol	112-34-5	Ceiling Limit: 100 mg/m ³
	Trade Secret	Trade Secret	Ceiling Limit: 550 mg/m ³
	Trade Secret	Trade Secret	8-Hour TWA: 270 mg/m ³
Estonia	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])
Hungary	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³
	2-(2-butoxyethoxy)ethanol	112-34-5	60-Minute STEL: 101.2 mg/m ³
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³
Latvia	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])
Lithuania	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 100 mg/m ³ (15 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 200 mg/m ³ (30 ppm)
	Trade Secret	Trade Secret	15-Minute STEL: 450 mg/m ³ ([75 ppm])
	Trade Secret	Trade Secret	8-Hour TWA: 300 mg/m ³ ([50 ppm])
Malta	2-(2-butoxyethoxy)ethanol	112-34-5	TWA: 67.5 mg/m ³ (10 ppm)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	TWA: 308 mg/m ³ ([50 ppm])
Poland	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67 mg/m ³
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 100 mg/m ³
	Trade Secret	Trade Secret	15-Minute STEL: 480 mg/m ³
	Trade Secret	Trade Secret	8-Hour TWA: 240 mg/m ³
Romania	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])
Slovakia	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])
Slovenia	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])
	Trade Secret	Trade Secret	15-Minute STEL: 308 mg/m ³ ([50 ppm])
European Union	2-(2-butoxyethoxy)ethanol	112-34-5	Threshold Limit Value (TLV): 67.5 mg/m ³ ([IOEL])
	2-(2-butoxyethoxy)ethanol	112-34-5	Threshold Limit Value (TLV): 10 ppm ([IOEL])
	2-(2-butoxyethoxy)ethanol	112-34-5	STEL: 101.2 mg/m ³ ([IOEL])
	2-(2-butoxyethoxy)ethanol	112-34-5	STEL: 15 ppm ([IOEL])
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ (50 ppm; [SCOEL])
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ (50 ppm; [IOEL])
Austria	2-(2-butoxyethoxy)ethanol	112-34-5	TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	Ceiling Limit: 614 mg/m ³ ([100 ppm])
	Trade Secret	Trade Secret	TWA: 307 mg/m ³ ([50 ppm])
Belgium	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])
Denmark	2-(2-butoxyethoxy)ethanol	112-34-5	TWA: 68 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	STEL: 101 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	TWA: 309 mg/m ³ ([50 ppm])
Finland	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 68 mg/m ³ (10 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 310 mg/m ³ ([50 ppm])
France	2-(2-butoxyethoxy)ethanol	112-34-5	TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	TWA: 308 mg/m ³ ([50 ppm])
Germany (MAK)	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67 mg/m ³ (10 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 310 mg/m ³ ([50 ppm])
Germany (TRGS 900)	2-(2-butoxyethoxy)ethanol	112-34-5	Level Limit Value: 67 mg/m ³ (10 ppm)
	Trade Secret	Trade Secret	Limit Value: 310 mg/m ³ ([50 ppm])
Greece	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	15-Minute STEL: 900 mg/m ³ ([150 ppm])
	Trade Secret	Trade Secret	8-Hour TWA: 600 mg/m ³ ([100 ppm])
Ireland	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])
Italy	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])
Luxembourg	2-(2-butoxyethoxy)ethanol	112-34-5	TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	TWA: 308 mg/m ³ ([50 ppm])
Portugal	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Trade Secret	Trade Secret	STEL: 150 ppm
	Trade Secret	Trade Secret	TWA: 100 ppm
Spain	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])
Sweden	2-(2-butoxyethoxy)ethanol	112-34-5	Level Limit Value: 10 ppm
	2-(2-butoxyethoxy)ethanol	112-34-5	Level Limit Value: 68 mg/m ³
	2-(2-butoxyethoxy)ethanol	112-34-5	Ceiling Limit: 101 mg/m ³ (10 ppm)
	Trade Secret	Trade Secret	Level Limit Value: 300 mg/m ³ ([50 ppm])
	Trade Secret	Trade Secret	15-Minute STEL: 450 mg/m ³ ([75 ppm])
United Kingdom	2-(2-butoxyethoxy)ethanol	112-34-5	TWA: 67.5 mg/m ³ (15 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])
The Netherlands	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 50 mg/m ³
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 100 mg/m ³
	Trade Secret	Trade Secret	8-Hour TWA: 300 mg/m ³
Cyprus	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 67.5 mg/m ³ (10 ppm)
	2-(2-butoxyethoxy)ethanol	112-34-5	15-Minute STEL: 101.2 mg/m ³ (15 ppm)
	Trade Secret	Trade Secret	8-Hour TWA: 308 mg/m ³ ([50 ppm])

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Derived No Effect Level (DNEL):

Ingredient Name: 2-(2-butoxyethoxy)ethanol

CAS #: 112-34-5

Workers - Systemic Effects	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified

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Workers - Local Effects	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	101.2 mg/m ³
	Acute - Dermal	No hazard identified
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	67.5 mg/m ³
	Chronic - Dermal	Hazard identified but no DNEL available
General Population - Systemic Effects	Acute - Oral	No hazard identified
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	6.25 mg/kg bw/day
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified
General Population - Local Effect	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	Hazard identified but no DNEL available
	Acute - Dermal	No hazard identified
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	Hazard identified but no DNEL available
	Chronic - Dermal	No hazard identified

Ingredient Name: Trade Secret

CAS #: Trade Secret

Workers - Systemic Effects	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	308 mg/m ³
	Chronic - Dermal	283 mg/kg bw/day
Workers - Local Effects	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified
General Population - Systemic Effects	Acute - Oral	No hazard identified
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	36 mg/kg bw/day
	Chronic - Inhalation	37.2 mg/m ³
	Chronic - Dermal	121 mg/kg bw/day

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General Population - Local Effect	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified

Predicted No Effect Concentration (PNEC):

Ingredient Name: 2-(2-butoxyethoxy)ethanol

CAS #: 112-34-5

Environmental Protection Target	PNEC
Fresh water	1.1 mg/L
Freshwater sediments	4.4 mg/kg sediment dw
Marine water	0.11 mg/L
Marine sediments	0.44 mg/kg sediment dw
Microorganisms in sewage treatment	No hazard identified
Soil (agricultural)	0.32 mg/kg soil dw
Air	No hazard identified
Food chain	56 mg/kg food

Ingredient Name: Trade Secret

CAS #: Trade Secret

Environmental Protection Target	PNEC
Fresh water	19 mg/L
Freshwater sediments	70.2 mg/kg sediment dw
Marine water	1.9 mg/L
Marine sediments	7.02 mg/kg sediment dw
Microorganisms in sewage treatment	4168 mg/L
Soil (agricultural)	2.74 mg/kg soil dw
Air	No hazard identified
Oral (Secondary Poisoning)	No exposure expected

Information on monitoring procedures:

Not determined or not applicable.

8.2 Exposure controls

Appropriate engineering controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a

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specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Product (substance / mixture) related measures to prevent exposure:	Not determined or not applicable.
Instruction measures to prevent exposure:	Not determined or not applicable.
Organisational measures to prevent exposure:	Not determined or not applicable.
Technical measures to prevent exposure:	Not determined or not applicable.

Risk management measures to control exposure:

Not determined or not applicable.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Color	Clear
Odor/Odor threshold	Characteristic
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	>93.5 °C
Flammability	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Relative vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Particle characteristics	Not determined or not available.

9.2 Other information

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9.2.1 Information with regard to physical hazard classes

Explosives	No data available/Not applicable
Flammable gases	No data available/Not applicable
Aerosols	No data available/Not applicable
Oxidizing gases	No data available/Not applicable
Gases under pressure	No data available/Not applicable
Flammable liquids	No data available/Not applicable
Flammable solids	No data available/Not applicable
Self-reactive substances and mixtures	No data available/Not applicable
Pyrophoric liquids	No data available/Not applicable
Pyrophoric solids	No data available/Not applicable
Self-heating substances and mixtures	No data available/Not applicable
Substances and mixtures, which emit flammable gases in contact with water	No data available/Not applicable
Oxidizing liquids	No data available/Not applicable
Oxidizing solids	No data available/Not applicable
Organic peroxides	No data available/Not applicable
Corrosive to metals	No data available/Not applicable
Desensitized explosives	No data available/Not applicable

9.2.2 Other safety characteristics

None.

SECTION 10: Stability and reactivity

10.1 Reactivity:

Not reactive under recommended handling and storage conditions.

10.2 Chemical stability:

Stable under recommended handling and storage conditions.

10.3 Possibility of hazardous reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

10.4 Conditions to avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

10.5 Incompatible materials:

Aluminum, Light metals

10.6 Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity

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

Product data: No data available.

Substance data:

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878.

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Name	Route	Result
2-(2-butoxyethoxy)ethanol	dermal	LD50 Rabbit: 2764 mg/kg
	oral	LD50 Mouse: 2410 mg/kg
Trade Secret	oral	LD50 Rat: >5000 mg/kg
	dermal	LD50 Rabbit: 9510 mg/kg

Skin corrosion/irritation

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

Product data:

No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment:

Causes serious eye irritation.

Product data:

No data available.

Substance data:

Name	Result
2-(2-butoxyethoxy)ethanol	Causes serious eye irritation.

Respiratory or skin sensitization

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

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

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

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
2-(2-butoxyethoxy)ethanol	Not Applicable
Trade Secret	Not Applicable

Germ cell mutagenicity

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

Product data: No data available.

Substance data: No data available.

Reproductive Toxicity

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

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

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

Product data:

No data available.

Substance data: No data available.

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878.

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Specific target organ toxicity (repeated exposure)

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

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

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

Product data:

No data available.

Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

11.2 Information on other hazards

Endocrine disrupting properties:

Substance data: No data available.

Other information:

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute (short-term) toxicity

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

Product data: No data available.

Substance data:

Name	Result
2-(2-butoxyethoxy)ethanol	Fish LC50 <i>Leopomis macrochirus</i> : 1300 mg/L (96 hr)
	Aquatic Invertebrates EC50 <i>Daphnia magna</i> : >100 mg/L (48 hr [mobility])
	Aquatic Plants EC50 <i>Desmodemus subspicatus</i> : >100 mg/L (96 hr [growth rate and biomass])
Trade Secret	Aquatic Plants EC50 Freshwater green algae: >969 mg/L (72 hr [biomass])
	Fish LC50 <i>Poecilia reticulata</i> : >1000 mg/L (96 hr)
	Aquatic Invertebrates EC50 <i>Daphnia magna</i> : 1919 mg/L (48 hr [mortality])

Chronic (long-term) toxicity

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

Product data: No data available.

Substance data:

Name	Result
Trade Secret	Aquatic Invertebrates NOEC <i>Daphnia magna</i> : >0.5 mg/L (22 d [reproduction])

12.2 Persistence and degradability

Product data: No data available.

Substance data:

Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878.

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Name	Result
2-(2-butoxyethoxy)ethanol	The substance is readily biodegradable (85% degradation in water, measured by O ₂ consumption, after 28 days).
Trade Secret	The substance is readily biodegradable (79% degradation in 28 days, measured by Oxygen consumption).

12.3 Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
2-(2-butoxyethoxy)ethanol	The substance has a low potential for bioaccumulation based on log K _{ow} ≤ 3.
Trade Secret	The substance is not expected to bioaccumulate (Log K _{ow} : <1).

12.4 Mobility in soil

Product data: No data available.

Substance data: No data available.

12.5 Results of PBT and vPvB assessment

Product data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance data:

PBT assessment:

2-(2-butoxyethoxy)ethanol	The substance is not PBT.
Trade Secret	The substance is not PBT.

vPvB assessment:

2-(2-butoxyethoxy)ethanol	The substance is not vPvB.
Trade Secret	The substance is not vPvB.

12.6 Endocrine disrupting properties

Substance data: No data available.

12.7 Other adverse effects: No data available.

12.8 Hazard to the ozone layer

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

Product data: No data available.

Substance data: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal:

Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to contaminate soil or water. Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

Waste codes / waste designations according to LoW: Not determined or not available.

13.1.2 Waste treatment-relevant information: Not determined or not available.

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According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878.

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13.1.3 Sewage disposal-relevant information: Not determined or not available.

13.1.4 Other disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities.

SECTION 14: Transport information

International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

UN number or ID number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Carriage of Dangerous Goods by Inland Waterways (ADN)

UN number or ID number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number or ID number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number or ID number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

Maritime Transport in Bulk according to IMO Instruments

Bulk Name	None
Ship type	None
Pollution category	None
IMO hazard class	None

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Environmental hazards	None
Material hazardous only in bulk	None
Cargo Group	None

SECTION 15: Regulatory information

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

European regulations

Inventory listing (EINECS): All ingredients are listed or exempt.

REACH SVHC candidate list: None of the ingredients are listed.

REACH SVHC Authorizations: None of the ingredients are listed.

REACH Restriction:

112-34-5	2-(2-butoxyethoxy)ethanol	Listed
Trade Secret	Trade Secret	Not Listed

Water hazard class (WGK) (Product): Not determined.

Water hazard class (WGK) (Substance):

Ingredient Name	CAS	Class
2-(2-butoxyethoxy)ethanol	112-34-5	Water hazard class 1: slightly hazardous to water
Trade Secret	Trade Secret	Water hazard class 1: slightly hazardous to water

Other regulations

Germany TA Luft: None of the ingredients are listed.

Additional information: Not determined.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

Abbreviations and Acronyms: None

Classification procedure:

Classification according to Regulation (EC) No. 1272/2008 (CLP)	Method Used
Eye Irritation, category 2	Calculation method

Summary of classification(s) in section 3:

Eye Irrit. 2	Eye Irritation, category 2
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Summary of hazard statements in section 3:

H319	Causes serious eye irritation
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Disclaimer:

This product has been classified in accordance with EC No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and EC No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation, and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet