

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 21.07.2023

Version number 1

Revision: 21.07.2023

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

- **1.1 Product identifier**
- **Trade name:** Butoxypropanol / PnB
- **Article number:** 315
- **CAS Number:**
5131-66-8
- **EC number:**
225-878-4
- **Index number:**
603-052-00-8
- **Registration number** 01-2119475527-28
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Solvent for various applications
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Möller Chemie GmbH & Co. KG
Bürgerkamp 1
D-48565 Steinfurt
Tel.: 02551/9340-0
Fax: 02551/9340-60
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**
Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS07

- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
- **Precautionary statements**
P264 Wash thoroughly after handling.
P280 Wear eye protection / face 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.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P337+P313 If eye irritation persists: Get medical advice/attention.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 21.07.2023

Version number 1

Revision: 21.07.2023

Trade name: Butoxypropanol / PnB

(Contd. of page 1)

· 2.3 Other hazards

The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

· Results of PBT and vPvB assessment**· PBT:**

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

· vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

SECTION 3: Composition/information on ingredients**· 3.1 Substances****· CAS No. Description**

5131-66-8 Butoxypropanol / PnB

· Identification number(s)**· EC number: 225-878-4****· Index number: 603-052-00-8****SECTION 4: First aid measures****· 4.1 Description of first aid measures**

· After inhalation: Supply fresh air.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: Rinse out mouth and then drink plenty of water.

· 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures**· 5.1 Extinguishing media**

· Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fire with alcohol resistant foam.

· For safety reasons unsuitable extinguishing agents: Water with full jet

· 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide, carbon dioxide

· 5.3 Advice for firefighters

· Protective equipment: Wear self-contained respiratory protective device.

· Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.

· 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust).

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.07.2023

Version number 1

Revision: 21.07.2023

Trade name: Butoxypropanol / PnB

(Contd. of page 2)

See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation / exhaustion at the workplace.
- **Information about fire - and explosion protection:** Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in well closed containers, cool and dry.
- **Information about storage in one common storage facility:** See section 10.5
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class:** 10
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **PNECs**
- Fresh water: 0.525 mg/l
- Sea water: 0.0525 mg/l
- sporadic release: 5.25 mg/l
- Sediment (fresh water): 2.36 mg/kg
- Sediment (sea water): 0.236 mg/kg
- Soil: 0.16 mg/kg
- Sewage treatment plant: 10 mg/l
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Avoid contact with the eyes and skin.
- **Respiratory protection:**
- Respiratory protection if ventilation is inadequate. Gas filter for organic gases/vapors (Boiling point > 65 °C, according to EN 141).
- **Hand protection**



Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
- Butyl rubber, BR
- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)

EU

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.07.2023

Version number 1

Revision: 21.07.2023

Trade name: *Butoxypropanol / PnB*

(Contd. of page 3)

· **Eye/face protection**

Tightly sealed goggles

· **Body protection:** *Protective work clothing*

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state	<i>Fluid</i>
· Colour:	<i>Colourless</i>
· Odour:	<i>Ether-like</i>
· Odour threshold:	<i>Not determined.</i>
· Melting point/freezing point:	<i>-85 °C</i>
· Boiling point or initial boiling point and boiling range	<i>165 - 175 °C</i>
· Flammability	<i>Not applicable.</i>
· Lower and upper explosion limit	
· Lower:	<i>1.3 Vol %</i>
· Upper:	<i>9 Vol %</i>
· Flash point:	<i>62.5 °C</i>
· Ignition temperature:	<i>250 °C</i>
· Decomposition temperature:	<i>Not determined.</i>
· pH	<i>Not determined.</i>
· Viscosity:	
· Kinematic viscosity	<i>Not determined.</i>
· Dynamic:	<i>Not determined.</i>
· Solubility	
· water at 20 °C:	<i>52 g/l</i>
· Partition coefficient n-octanol/water (log value)	<i>Not determined.</i>
· Vapour pressure at 20 °C:	<i>0.84 hPa</i>
· Density and/or relative density	
· Density at 20 °C:	<i>0.87 - 0.89 g/cm³</i>
· Relative density	<i>Not determined.</i>
· Vapour density	<i>Not determined.</i>

· 9.2 Other information

· Appearance:	
· Form:	<i>Fluid</i>
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	<i>Not determined.</i>
· Explosive properties:	<i>Product does not present an explosion hazard.</i>
· Change in condition	
· Evaporation rate	<i>Not determined.</i>

· Information with regard to physical hazard classes

· Explosives	<i>Void</i>
· Flammable gases	<i>Void</i>
· Aerosols	<i>Void</i>
· Oxidising gases	<i>Void</i>
· Gases under pressure	<i>Void</i>
· Flammable liquids	<i>Void</i>
· Flammable solids	<i>Void</i>
· Self-reactive substances and mixtures	<i>Void</i>

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.07.2023

Version number 1

Revision: 21.07.2023

Trade name: *Butoxypropanol / PnB*

(Contd. of page 4)

· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
 Reacts with strong acids.
 Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
 Strong oxidizing agents
 Strong acids
- **10.6 Hazardous decomposition products:**
 No hazardous decomposition products if stored and handled as prescribed/indicated become.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

Dermal	LD50	>2.000 mg/kg (rat)
--------	------	--------------------

- **Skin corrosion/irritation**
 Causes skin irritation.
- **Serious eye damage/irritation**
 Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
 Fish toxicity:
 LC50 / 96 h > 100 mg / l (*Pimephales promelas*)
 Aquatic invertebrates:
 EC50 / 48 h < 100 mg / l (*Daphnia magna*)
 Microorganisms / Effect on activated sludge:

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 21.07.2023

Version number 1

Revision: 21.07.2023

Trade name: Butoxypropanol / PnB

(Contd. of page 5)

- EC20 / 0.5 h > 1000 mg / l
 - **12.2 Persistence and degradability** Easily biodegradable
 - **12.3 Bioaccumulative potential** No further relevant information available.
 - **12.4 Mobility in soil** No further relevant information available.
 - **12.5 Results of PBT and vPvB assessment**
 - **PBT:** This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
 - **vPvB:** This substance is not considered to be very persistent nor very bioaccumulative (vPvB).
 - **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
 - **12.7 Other adverse effects**
 - **Additional ecological information:**
 - **General notes:**
- Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal according to local regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|-----------------|
| · 14.1 UN number or ID number
· ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name
· ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Void |
| · 14.4 Packing group
· ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards:
· Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | Void |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

EU

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 21.07.2023

Version number 1

Revision: 21.07.2023

Trade name: Butoxypropanol / PnB

(Contd. of page 6)

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Product safety department

· **Contact:** Mrs. Steyer

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

EU