

Safety Data Sheet

According to ABNT NBR 14725-4

Issue date: 11/23/2023 Revision date: 07/11/2024 Version: 1.2

SECTION 1: Identification of Product and Company

1.1. Product identifier

Trade name : Mowital® B Chemical name : polyvinyl butyral

CAS-No. 68648-78-2 or 63148-65-2

Product code 200002

Recommended use Industrial use, temporary binder for ceramics, adhesives, Coating, 3d printing, printing inks

: (BR*) +55 11 4349 1907

(Access Code: 334674)

1.2. Company identification

Manufacturer/Supplier

Kuraray Europe GmbH Philipp-Reis-Str. 4

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Germany

Telephone: +49-69-305-85300

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Email competent person

Emergency number

product-safety@kuraray.com

Distributor

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Telephone: +1-800-423-9762 (within USA); +1-281-283-1711

(international)

E-mail: info@kurarayamerica.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GHS BR (ABNT NBR 14725)

Chemical product not classified as hazardous according to ABNT standard 14725

2.2. Label elements

GHS BR labelling

No labelling applicable

2.3. Other hazards not contributing to the classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name : polyvinyl butyral

CAS-No. : 68648-78-2 or 63148-65-2

Synonyms : B 14 S, B 16 H, B 20 H, B 30 H, B 30 HH, B 30 T, B 45 H, B 60 H, B 60 HH, B 60 T, B 75 H

Name	Product identifier		Classification according to GHS BR (ABNT NBR 14725)
Polyvinylbutyral (Main constituent)	CAS-No.: 68648-78-2	> 97.5	Not classified

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Name	Product identifier	%	Classification according to GHS BR (ABNT NBR 14725)
water (Impurity)	CAS-No.: 7732-18-5	< 2.4	Not classified
butyraldehyde (Impurity)	CAS-No.: 123-72-8	< 0.05	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Aquatic Acute 3, H402
sodium chloride (Impurity)	CAS-No.: 7647-14-5	< 0.05	Acute Tox. 5 (Oral), H303

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth thoroughly with water. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : Irritation of the respiratory tract, skin, eyes and mucous membranes possible.

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

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Could burn but do not ignite readily. The product may form dust and build up electrostatic

charges, which may produce an electric spark (ignition source). Proper grounding

procedures to avoid static electricity should be followed.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

Other information : Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be

done according to official regulations.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin, eyes and clothing. Concerning personal protective equipment to

use, see section 8.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. 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".

6.2. Environmental precautions

Avoid release to the environment. Environmental manager must be informed of all releases.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Avoid formation of dust. Pick up dust with a vacuum cleaner with HEPA filter. Do not use

compressed air for cleaning.

Other information : Disposal must be done according to official regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid creating or spreading dust. The material must not be deposited in large quantities,

especially on horizontal surfaces, as it could become released into the air from there, form flammable dust clouds and contribute to secondary explosions. Any unavoidable deposit of dust must be regularly removed. Prevent build-up of electrostatic charges (e.g, by grounding). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Provide appropriate exhaust ventilation at places of dust forming. Use only in well-ventilated areas. Observe recognised industrial hygiene measures. Avoid

prolonged and repeated contact with skin. Ensure good ventilation of the work station. Wear

personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Store in the original container well sealed.

Information about storage in one common storage : Keep away from food, drink and animal feeding stuffs.

facility

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Personal protective equipment

Hand protection:

In case of repeated or prolonged contact wear gloves. ISO 374-1. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

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Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Nitrile rubber	Nitrile rubber	6 (> 480 minutes)	0,12		EN ISO 374

Eye protection:

Safety glasses. ISO 16321-1

Skin and body protection:

Wear suitable protective clothing, EN 340

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. EN 143. Short term exposure

Other information:

Provide appropriate exhaust ventilation at places of dust forming. Ensure adequate air ventilation. Degree of ventilation must be adapted to the conditions. Where appropriate, use process chambers, local exhaust systems or other structural measures to control airborne concentrations to keep them below recommended exposure limits. If no exposure limits have been set, keep concentrations in the air at an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL (occupational exposure limit), suitable respiratory protection must be worn.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Powder.

Colour : colorless, appearance white

Odour : odourless Odour threshold : Not available : Not available рΗ : Not available Melting point Freezing point : Not applicable : Not available Boiling point : Not applicable Flash point Relative evaporation rate (butylacetate=1) : Not applicable

Flammability : Could burn but do not ignite readily.

Explosive limits : Not available
Vapour pressure : Not applicable
Relative vapour density at 20°C : Not applicable

Relative density : Not specifically applicable Relative gas density : Not specifically applicable

Solubility : Not available
Partition coefficient n-octanol/water (Log Kow) : Not available
Auto-ignition temperature : Not applicable.
Decomposition temperature : Not available
Viscosity, kinematic : Not applicable
Viscosity, dynamic : Not applicable

Explosive properties : Product is not explosive

Oxidising properties : Non oxidizing

9.2. Other information

VOC content : < 0,1 %

Additional information : Vicat softening temperature 50 - 63 °C DIN EN ISO 306

Dust explosion category : St1 – Weak explosion

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SECTION 10: Stability and reactivity

Chemical stability : Stable under normal conditions.

Conditions to avoid : None under recommended storage and handling conditions (see section 7).

Hazardous decomposition products : Carbon oxides (CO, CO2).

Incompatible materials : Strong acids. Strong oxidizing agents.

Possibility of hazardous reactions : No dangerous reactions known under normal conditions of use.

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

Handling temperature : No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met) Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met) Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met) Skin corrosion/irritation Not classified (Based on available data, the classification criteria are not met) Serious eye damage/irritation Not classified (Based on available data, the classification criteria are not met) Respiratory or skin sensitisation Not classified (Based on available data, the classification criteria are not met) Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met) Carcinogenicity : Not classified (Based on available data, the classification criteria are not met) Reproductive toxicity : Not available (Based on available data, the classification criteria are not met) STOT-single exposure : Not classified (Based on available data, the classification criteria are not met) STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard : Not available

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

Symptoms/effects : Irritation of the respiratory tract, skin, eyes and mucous membranes possible.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term : Not classified (Based on available data, the classification criteria are not met)

(acute)

Hazardous to the aquatic environment, long-term : Not classified (Based on available data, the classification criteria are not met)

(chronic)

12.2. Persistence and degradability

Mowital® B (68648-78-2 or 63148-65-2)

Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Mowital® B (68648-78-2 or 63148-65-2)

Bioaccumulative potential No data available.

12.4. Mobility in soil

butyraldehyde (123-72-8)

Surface tension 70 mN/m (20 °C; 1 g/L; (OECD 115 method))

sodium chloride (7647-14-5)

Ecology - soil Expected to be highly mobile in soil.

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12.5. Other adverse effects

Hazardous to the ozone layer

: Not classified (Based on available data, the classification criteria are not met)
No other adverse effects on the environment (e.g. ozone depletion, photochemical ozone formation potential, global warming potential) are expected from this constituent.

SECTION 13: Disposal considerations

Waste treatment methods

: Disposal must be done according to official regulations. Do not discharge into drains or the $\,$

environment. Do not dispose of with domestic waste.

Product/Packaging disposal recommendations

: Recycle or dispose of in compliance with current legislation.

SECTION 14: Transport information

National and international Regulations

ANTT	IMDG	IATA		
UN number				
Not applicable	Not applicable	Not applicable		
UN Proper Shipping Name				
Transport hazard class(es)				
Not applicable	Not applicable	Not applicable		
Danger labels				
Not applicable	Not applicable	Not applicable		
Subsidiary risk				
Not applicable	Not applicable	Not applicable		
Risk Number				
Not applicable				
Packing group				
Not applicable	Not applicable	Not applicable		
Special provisions				
Not applicable	Not applicable	Not applicable		
Dangerous for the environment				
No	No	No		

14.2 Other information

No additional information available

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SECTION 15: Regulatory information

15.1. National regulations

Brazil Local Regulations

: Federal Decree no. 10.088, of 5 November 2019 – Promulgates Convention no. 170 of the WLO, relating to Safety in the Use of Chemicals in the Workplace, ratified by the Federative Republic of Brazil.

Federal Decree no. 96.044, of 18 May 1988 - Approves Regulations for Road

Transportation of Hazardous Materials

Ministerial Order no. 240, of March 12, 2019. Establishes procedures for the control and supervision of chemicals and defines chemicals subject to control by the Federal Police. Standard ABNT NBR 14725.

Resolution no. 5998, of November 3, 2022, updates the regulation for road transport of dangerous goods, approves its Complementary Instructions, and other measures.

SECTION 16: Other information

Abbreviations and acronyms

Other information : A safety data sheet is not required for this product. This Product Safety Information Sheet

has been created on a voluntary basis.

Data sources : Information provided by the manufacturer.

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: ADN - European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by

Road

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level
DNEL - Derived-No Effect Level
EC50 - Median effective concentration

IARC - International Agency for Research on Cancer IATA - International Air Transport Association

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration

OECD - Organisation for Economic Co-operation and Development

PBT - Persistent Bioaccumulative Toxic PNEC - Predicted No-Effect Concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet STP - Sewage treatment plant TLM - Median Tolerance Limit

vPvB - Very Persistent and Very Bioaccumulative

KFT SDS BR 01 - Version 22.2

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.