

SECTION 1: Identification of the hazardous chemical or mixture and of the supplier or manufacturer

1.1. GHS product identifier

Product form	: Substance
Trade name	: Mowital® B
Chemical name	: polyvinyl butyral
CAS-No.	: 68648-78-2 or 63148-65-2
Product code	: 200002
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

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use	: Industrial use temporary binder for ceramics adhesives Coating 3d printing printing inks
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1.4. Supplier's details

Manufacturer/Supplier

Kuraray Europe GmbH
Philipp-Reis-Str. 4
Hattersheim am Main, 65795
Germany
Telephone: +49-69-305-85300
Technical Contact: +49-69-305-13345

Email competent person

product-safety@kuraray.com

Distributor

Kuraray America, Inc.
3700 Bay Area Blvd.,
Suite 680 Houston,
TX 77058-1160 USA
Telephone: +1-800-423-9762 (within USA); +1-281-283-1711 (international)
E-mail: info@kurarayamerica.com

1.5. Emergency phone number

Emergency number	: (MX*) +52 55 41696225 (Access Code: 334674)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS MX classification

Not classified

2.2. Label elements

GHS MX labelling

No labelling applicable

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According to the NOM-018-STPS-2015

2.3. Other hazards which do not result in classification

Adverse physicochemical, human health and environmental effects : To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Mowital® B
Trade name : Mowital® B
Chemical name : polyvinyl butyral
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	%	GHS MX classification
Polyvinylbutyral (Main constituent)	CAS-No.: 68648-78-2	> 97.5	Not classified
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
sodium chloride (Impurity)	CAS-No.: 7647-14-5	< 0.05	Acute Tox. 5 (Oral), H303

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

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention. Contact with dust: Irritating to eyes and mucous membranes.
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/effects, acute and delayed

Symptoms/effects : Irritation of the respiratory tract, skin, eyes and mucous membranes possible.
Potential adverse human health effects and symptoms : Dust may irritate the respiratory tract, skin and eyes.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

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Unsuitable extinguishing media : Strong water jet.

5.2. Specific hazards arising from the chemical

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. Carbon dioxide. Carbon monoxide.

5.3. Special protective actions for fire-fighters

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.

SECTION 6: Measures to be taken in case of accidental spillage or accidental leakage

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

Technical measures : 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. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Precautions for safe handling : 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.

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Incompatible materials : Keep away from strong acids and strong oxidizers.
Information about storage in one common storage facility : Keep away from food, drink and animal feeding stuffs.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

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

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

Eye protection : Sealed safety goggles. ISO 16321-1
Skin and body protection : Wear suitable protective clothing. EN ISO 13688
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Dust production: dust mask with filter type P2. EN 143. Short term exposure. Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust
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 : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : Not applicable
Melting point : No data available
Freezing point : Not applicable
Boiling point : No data available
Flash point : Not applicable
Flammability (solid, gas) : Could burn but do not ignite readily.
Auto-ignition temperature : Not applicable.
Decomposition temperature : No data available

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Vapour pressure	: Not applicable
Relative vapour density at 20°C	: Not applicable
Relative density	: Not specifically applicable
Relative gas density	: Not specifically applicable
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: No data available

9.2. Other information

VOC content	: < 0.1 %
Additional information	: Vicat softening temperature 50 - 63 °C DIN EN ISO 306
Dust explosion category	: St 1 - Weak explosion

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

Potential adverse human health effects and symptoms	: Dust may irritate the respiratory tract, skin and eyes.
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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)

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Reproductive toxicity	: Not classified (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 classified

SECTION 12: Ecological information

12.1. Toxicity

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

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.
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12.3. Bioaccumulative potential

Mowital® B (68648-78-2 or 63148-65-2)

Bioaccumulative potential	No data available
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12.4. Mobility in soil

butyraldehyde (123-72-8)

Surface tension	70 mN/m (20 °C; 1 g/L; (OECD 115 method))
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sodium chloride (7647-14-5)

Ecology - soil	Expected to be highly mobile in soil.
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12.5. Other adverse effects

Ozone	: Not classified. No other adverse effects on the environment (e.g. ozone depletion, photochemical ozone formation potential, global warming potential) are expected from this constituent.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Recycle or dispose of in compliance with current legislation.
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.

SECTION 14: Transport information

In accordance with NOM / UN RTDG / IMDG / IATA

NOM	UN RTDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			

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NOM	UN RTDG	IMDG	IATA
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

14.6. Special precautions for user

NOM

No data available

UN RTDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

National regulations

water (7732-18-5):

Listed in the INSQ (National Inventory of Chemical Substances)

sodium chloride (7647-14-5):

Listed in the INSQ (National Inventory of Chemical Substances)

International regulations

No additional information available

SECTION 16: Other information including those related to the preparation and updating of safety data sheets

Issue date : 11/23/2023

Revision date : 11/23/2023

Full text of H-statements

H225	Highly flammable liquid and vapour.
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Full text of H-statements	
H303	May be harmful if swallowed
H319	Causes serious eye irritation.

Abbreviations and acronyms	
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

Data sources : Information provided by the manufacturer.
Department issuing data specification sheet: : KFT Chemieservice GmbH
Im Leuschnerpark 3
D-64347 Griesheim

Phone: +49 6155-8981-400
Fax: +49 6155 8981-500
SDS Service: +49 6155 8981-522

Contact person : Dr. Christian Rank

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KFT SDS MX 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.