

kuraray Mowital® B

Material Safety Data Sheet

In Accordance with MOEL Public notice 2013-37
MSDS Number: No data available
Issue date: 11/23/2023 Revision date: 11/23/2023 Version: 1.00

1. Chemical product and company identification

1.1. 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
Type of product : Polymer
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. Recommended uses and restrictions

1.2.1. Recommended use

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

1.2.2. Restrictions on use

No data available

1.3. Supplier information

- Manufacturer/Supplier
Company : Kuraray Europe GmbH
Address : (65795) Germany Hattersheim am Main Philipp-Reis-Str. 4
Tel. : +49-69-305-85300
Emergency telephone number : (KR*) +82 02 64339507; +080 822 1365; +080 880 0455
(Access Code: 334674)
Contact : Telephone: +49-69-305-85300
Technical Contact: +49-69-305-13345

- Email competent person
Company : product-safety@kuraray.com

- Distributor
Company : Kuraray Co., Ltd.
Address : Tokiwabashi Tower 2-6-4,
Otemachi, Chiyoda-ku,
Tokyo 100-0004,
Japan
Tel. : +81-3-6701-1422
Emergency telephone number : +81-3-6701-1422
E-mail : pvb_inquiry@kuraray.co.jp

2. Hazards identification

2.1. Classification of the substance or mixture

Not classified

2.2. Label elements

2.2.1. Hazard pictograms (GHS KR)

Not applicable

2.2.2. Signal word (GHS KR)

Not applicable

2.2.3. Hazard statements (GHS KR)

Not applicable

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2.2.4. Precautionary statements (GHS KR)

Not applicable

2.3. Hazards - Other hazards which do not result in classification - Hazard Risk

Fine particles may form explosive mixtures with air. Prevent dust accumulation to minimize explosion hazard. This material does not ignite easily; however, feasible precautions against dust explosion are recommended.

3. Composition/information on ingredients

Product form : Substance

Substance name	Other Names	Product identifier number	Concentration (%)
Polyvinylbutyral (Main constituent)	-	CAS-No.: 68648-78-2 KECI-No.: KE-29059	> 97.5
water (Impurity)	-	CAS-No.: 7732-18-5 KECI-No.: KE-35400	< 2.4
butyraldehyde (Impurity)	-	CAS-No.: 123-72-8 KECI-No.: KE-03746	< 0.05
sodium chloride (Impurity)	-	CAS-No.: 7647-14-5 KECI-No.: KE-31387	< 0.05

4. First-aid measures

4.1. First-aid measures after eye contact

Rinse eyes with water as a precaution.

4.2. First-aid measures after skin contact

Wash skin with plenty of water.

4.3. First-aid measures after inhalation

Remove person to fresh air and keep comfortable for breathing.

4.4. First-aid measures after ingestion

Rinse mouth thoroughly with water. Call a poison center or a doctor if you feel unwell.

4.5. Other medical advice or treatment

Treat symptomatically.

5. Fire-fighting measures

5.1. Suitable (and unsuitable) 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 : The product is not flammable. 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.

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5.3. Special protective equipment and precautions 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.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Ventilate spillage area.
- Do not attempt to take action without suitable protective equipment.
- For further information refer to section 8: "Exposure controls/personal protection".
- Disposal must be done according to official regulations.

6.2. Environmental precautions and protective procedures

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

6.3. Methods and material for containment and cleaning up

- Avoid formation of dust. Pick up dust with a vacuum cleaner with HEPA filter. Do not use compressed air for cleaning.

7. Handling and storage

7.1. Precautions for safe handling

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

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

8. Exposure controls/personal protection

8.1. Occupational Exposure Limits

8.2. Appropriate engineering controls

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

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8.3. Personal protection

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

Eye protection

Sealed safety goggles. ISO 16321-1

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

Skin and body protection

Wear suitable protective clothing. EN ISO 13688

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.

9. Physical and chemical properties

- a) Appearance : Powder.
- Physical state : Solid
- Colour : colorless, appearance white.
- b) Odour : odourless.
- c) Odour threshold : No data available
- d) pH : No data available
- e) Melting / freezing point : No data available / Not applicable
- f) Initial boiling point and boiling range : No data available
- g) Flash point : Not applicable
- h) Evaporation rate : No data available
- i) Flammability (solid, gas) : No data available
- j) Upper / lower flammability or explosive limits : No data available
- k) Vapour pressure : Not applicable
- l) Solubility : No data available
- m) Vapour density : Not applicable
- n) Relative density : Not specifically applicable
- o) Partition coefficient n-octanol/water (Log Kow) : No data available
- p) Auto-ignition temperature : Not applicable.
- q) Decomposition temperature : No data available
- r) Viscosity, kinematic : Not applicable
- Viscosity, dynamic : Not applicable
- s) Molecular mass : No data available

Other information

- Relative evaporation rate (butylacetate=1) : Not applicable
- Relative gas density : Not specifically applicable
- Explosive properties : Product is not explosive.
- Oxidising properties : Non oxidizing
- VOC content : < 2.5 %
- Additional information : Vicat softening temperature 50 - 63 °C DIN EN ISO 306.
- Dust explosion category : St 1 - Weak explosion

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10. Stability and reactivity

10.1. Chemical stability and Possibility of hazardous reactions

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

Stable under normal conditions.

No dangerous reactions known under normal conditions of use.

10.2. Conditions to avoid

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

10.3. Incompatible materials

Strong acids. Strong oxidizing agents.

10.4. Hazardous decomposition products

Carbon oxides (CO, CO₂).

11. Toxicological information

11.1. Information on exposure routes

Oral	: Not classified
Skin and eyes contact	: Not classified
Inhalation	: Not classified

11.2. Health hazards

Acute toxicity (oral):

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

Acute toxicity (dermal):

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

Acute toxicity (inhalation):

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

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

Skin corrosion/irritation:

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

Serious eye damage/irritation:

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

Respiratory sensitization:

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

Skin sensitization:

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

Carcinogenicity:

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

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Mutagenicity:

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

Reproductive toxicity:

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

STOT-single exposure:

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

STOT-repeated exposure:

Not classified

(Reason for no classification: Based on available data, the classification criteria are not met.)

Aspiration hazard:

Not classified

12. Ecological information

12.1. Ecotoxicity

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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sodium chloride (7647-14-5)

Partition coefficient n-octanol/water (Log Pow)	-3
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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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Partition coefficient n-octanol/water (Log Pow)	1.3 (20 °C; pH 4.4 - 4.7; (OECD 107 method))
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sodium chloride (7647-14-5)

Partition coefficient n-octanol/water (Log Pow)	-3
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Ecology - soil	Expected to be highly mobile in soil.
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12.5. Other adverse effects

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

13. Disposal considerations

13.1. Disposal method

Disposal must be done according to official regulations.
Do not discharge into drains or the environment.
Do not dispose of with domestic waste.

13.2. Disposal precaution

Recycle or dispose of in compliance with current legislation.

14. Transport information

In accordance with UN RTDG / IMDG / IATA

UN RTDG	IMDG	IATA
14.1. UN number		
Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Marine pollutant		
Not applicable	Not applicable	Not applicable
No data available		

14.6. Special precautions for user

No data available

15. Regulatory information

15.1. Occupational Safety and Health Act

No data available

15.2. Chemicals Control Act

No data available

15.3. ACT ON REGISTRATION, EVALUATION, ETC. OF CHEMICALS (K-REACH)

No data available

15.4. Safety Control of Dangerous Substances Act

No data available

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15.5. Wastes Control Act

No data available

15.6. Other Domestic and International Regulatory Information

Domestic

No data available

International

EU Regulatory Information

EU Candidate list (SVHC)

Not listed on the REACH Candidate List

EU authorization list (REACH Annex XIV)

Not listed on REACH Annex XIV (Authorisation List)

US Regulatory Information

No data available

16. Other information

16.1. 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

16.2. Issue date:

11/23/2023

16.3. Revision number and date:

1.00, 11/23/2023

16.4. Other information:

A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis.

16.5. Indication of changes:

No data available

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.