

## 1. Chemical product and company identification

### 1.1. Product identifier

Product form	: Substance
Trade name	: MOWITAL® B
Chemical name	: polyvinyl butyral
CAS-No.	: 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. printing inks.

#### 1.2.2. Restrictions on use

No data available

### 1.3. Supplier information

- Manufacturer/Supplier Company identification	: Kuraray Europe GmbH Philipp-Reis-Str. 4 D-65795 Hattersheim Germany Telefon: +49-69-305-85300 Technical contact: +49-69-305-13345 E-Mail: product-safety@kuraray.com
- Email competent person Company	: product-safety@kuraray.com
- Distributor Company Address Tel. Emergency telephone number	: Kuraray Co., Ltd. Japan Tokyo 100-0004 Otemachi, Chiyoda-ku Tokiwabashi Tower 2-6-4 : +81-3-6701-1422 : +82 02 64339507 (Access Code: 334674) +080 822 1365 +080 880 0455
E-mail	: <a href="https://www.kuraray.co.jp/inquiry">https://www.kuraray.co.jp/inquiry</a>

## 2. Hazards identification

### 2.1. Classification of the substance or mixture

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity - Single exposure, Category 3, Respiratory tract irritation	H335

### 2.2. Label elements

#### 2.2.1. Hazard pictograms (GHS KR)



#### 2.2.2. Signal word (GHS KR)

Warning.

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### 2.2.3. Hazard statements (GHS KR)

H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.

### 2.2.4. Precautionary statements (GHS KR)

#### Precaution:

P261 - Avoid breathing dust, fume, spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves, protective clothing, eye protection.

#### Treatment:

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 - Call a POISON CENTER, a doctor if you feel unwell.  
P332+P313 - If skin irritation occurs: Get medical attention.  
P337+P313 - If eye irritation persists: Get medical attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.

#### Storage:

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.

#### Disposal:

P501 - Dispose of contents according to waste related regulations.

### 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 (%)
polyvinyl butyral (Main constituent)	-	CAS-No.: 63148-65-2 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

If eye irritation persists: Get medical advice/attention.  
Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.

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### 4.2. First-aid measures after skin contact

If skin irritation occurs: Get medical advice/attention.

Wash skin with plenty of water.

Take off contaminated clothing.

### 4.3. First-aid measures after inhalation

Remove person to fresh air and keep comfortable for breathing.

Call a poison center or a doctor if you feel unwell.

### 4.4. First-aid measures after ingestion

Rinse mouth thoroughly with water.

If the quantity swallowed is significant : Call a physician immediately or Poison centre.

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 : Could burn but does 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.

### 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.

Avoid breathing dust, fume, spray.

Avoid contact with skin and eyes.

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.

Avoid the ingress of oil.

Environmental officer must be informed of all releases.

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### 6.3. Methods and material for containment and cleaning up

Avoid dust formation. Collect dust or particulates using a vacuum cleaner with a HEPA filter.

Do not use compressed air for cleaning.

Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

## 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.
Hygiene measures	: Wash contaminated clothing before reuse. 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 the original container well sealed. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
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

#### polyvinyl butyral (63148-65-2)

No data available

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No data available

#### water (7732-18-5)

No data available

#### butyraldehyde (123-72-8)

No data available

#### sodium chloride (7647-14-5)

No data available

### 8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Provide appropriate exhaust ventilation at places of dust forming.

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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.

### 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

Wear closed safety glasses.

ISO 16321-1

#### Hand protection

In case of repeated or prolonged contact wear gloves.

Chemically resistant protective 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.

EN 340

### 9. Physical and chemical properties

- a) Appearance : Powder.
  - Physical state : Solid
  - Colour : colourless. 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) : Could burn but does not ignite readily.
- 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 : No data available

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Viscosity, dynamic	: Not applicable
s) Molecular mass	: No data available
<b>Other information</b>	
Relative evaporation rate (butylacetate=1)	: Not applicable
Relative gas density	: Not specifically applicable
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing
Softening point	: Vicat softening temperature 50 - 63 °C DIN EN ISO 306
VOC content	: < 0.1 %
Other properties	: Dust explosion category. ST1. Weak explosion.

## 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 agent.

### 10.4. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>).

## 11. Toxicological information

### 11.1. Information on exposure routes

Oral	: Not classified (Based on available data, the classification criteria are not met).
Skin and eyes contact	: Acute toxicity (dermal) - Not classified (Based on available data, the classification criteria are not met) Skin corrosion/irritation - Causes skin irritation. Serious eye damage/eye irritation - Causes serious eye irritation. Skin sensitization - Not classified (Based on available data, the classification criteria are not met)
Inhalation	: Not classified (Based on available data, the classification criteria are not met)

### 11.2. Health hazards

#### 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)

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

#### Skin corrosion/irritation:

Causes skin irritation.

#### Serious eye damage/irritation:

Causes serious eye irritation.

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### Respiratory sensitization:

Not classified (Based on available data, the classification criteria are not met)

### Skin sensitization:

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)

### Mutagenicity:

Not classified (Based on available data, the classification criteria are not met)

### Reproductive toxicity:

Not classified (Based on available data, the classification criteria are not met)

### STOT-single exposure:

May cause respiratory irritation.

### STOT-repeated exposure:

Not classified (Based on available data, the classification criteria are not met)

### Aspiration hazard:

Not classified (Based on available data, the classification criteria are not met)

## 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

#### polyvinyl butyral (63148-65-2)

Persistence and degradability	Not rapidly degradable
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#### butyraldehyde (123-72-8)

Persistence and degradability	Readily biodegradable.
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Biodegradation	46 – 57 % (5 d; (OECD 301C method))
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#### sodium chloride (7647-14-5)

Persistence and degradability	Not applicable.
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### 12.3. Bioaccumulative potential

#### butyraldehyde (123-72-8)

Bioconcentration factor (BCF REACH)	3.162 (calculated value)
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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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### 12.4. Mobility in soil

#### butyraldehyde (123-72-8)

Surface tension	70 mN/m (20 °C; 1 g/L; (OECD 115 method))
Partition coefficient n-octanol/water (Log Pow)	1.3 (20 °C; pH 4.4 - 4.7; (OECD 107 method))

#### sodium chloride (7647-14-5)

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

### 12.5. Other adverse effects

Ozone	: Not classified (Based on available data, the classification criteria are not met)
Other adverse effects	: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

### 13.1. Disposal method

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.
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### 13.2. Disposal precaution

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

In accordance with UN RTDG / IMDG / IATA

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

### 14.6. Special precautions for user

No data available



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### 15. Regulatory information

#### 15.1. Occupational Safety and Health Act

Hazardous Substances Prohibited for Manufacturing	Not applicable	
Hazardous Substances Requiring Permission	Not applicable	
Threshold Limit Values Chemicals	Applicable	
Hazardous Substances Below Permissible Level	Not applicable	
Hazardous Substances Subject to Working Environment Measurement	Not applicable	
Hazardous Substances Subject to Workers Requiring Health Examination	Not applicable	
Hazardous Substances Subject to Control Substance Subject to Submission of PSM	Applicable	123-72-8: butyraldehyde (Flammable liquids) (Manufacture · Handling: 5,000kg (Storage: 200,000kg))

#### 15.2. Chemicals Control Act

Toxic Substances	Not applicable
Prohibited Substances	Not applicable
Restricted Substances	Not applicable
Substances Requiring Preparation for Accident	Not applicable

#### 15.3. Safety Control of Dangerous Substances Act

Safety Control of Dangerous Substances Act	Applicable	123-72-8: Butyraldehyde (Class 4 Flammable liquid - category 2 First class Petroleum Water-insoluble (Designated quantity: 200 liter))
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#### 15.4. Wastes Control Act

Hazardous Substances in Designated wastes	Not applicable
Types of wastes	No data available

#### 15.5. Other Domestic and International Regulatory Information

##### Act on Registration and Evaluation of Chemicals (K-REACH)

Korea Existing Chemicals Inventory (KECI)	Applicable	63148-65-2: Polyvinyl acetate polyvinyl pyrrolidone (KECI-No. : KE-29059) 7732-18-5: Water (KECI-No. : KE-35400) 123-72-8: Butanal (KECI-No. : KE-03746) 7647-14-5: Sodium chloride (KECI-No. : KE-31387) MOWITAL® B
Priority Existing Chemicals (PEC)	Applicable	
Substances Subject to Intensive Control	Not applicable	
CMR Substances	Not applicable	

##### Other Domestic Regulations

Persistent Organic Pollutants(POPs) Control Act	Not applicable
Ozone Depleting Substances(ODS)	Not applicable
PRTR Substances	Not applicable

##### 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)
EU restriction list (REACH Annex XVII)	Not applicable

##### US Regulatory Information

CERCLA Section 103 (40CFR302.4)	Not applicable
EPCRA Section 302 (40CFR355.30)	Not applicable
EPCRA Section 304 (40CFR355.40)	Not applicable
EPCRA Section 313 (40CFR372.65)	Not applicable

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### 16. Other information

#### 16.1. Data sources

Information provided by the manufacturer.

#### 16.2. Issue date

11/23/2023

#### 16.3. Revision number and date

Version : 3.0  
Revision date : 10/31/2024  
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 : Saskia Vetter

#### 16.4. Other information

No data available

#### 16.5. Indication of changes

Section	SDS changed items	Comments
	General revision	
2	Classification (GHS KR)	<b>Added</b>
4	First aid measures	<b>Added</b>
6	Accidental release measures	<b>Added</b>

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.