

1. Product and company identification

1.1. Product Name

Product form	: Substance
Trade name	: MOWITAL® SB
Chemical name	: polyvinyl butyral
CAS-No.	: 63148-65-2
Type of product	: Polymer
KECI-No.	: KE-29059
Other means of identification	: SB 70 HH

1.2. Recommended use of the chemical and restrictions on use

1.2.1. Recommended use

Industrial use. Temporary binder for ceramics. Adhesives. Coating. Printing inks. 3D print. Additive for Primers.

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 Telephone: +49 69 305 85300 Technical contact: +49 69 305 13345
- Email competent person Company	: product-safety@kuraray.com
- Distributor Company Address	: Kuraray Co., Ltd. Japan Tokyo 100-0004 Otemachi, Chiyoda-ku Tokiwabashi Tower 2-6-4
Tel.	: +81-3-6701-1422
Emergency information	: +080 880 0455 (Access Code: 334674)
E-mail	: pvb_inquiry@kuraray.co.jp

2. Hazards identification

2.1. Hazard Classification

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 including precautionary statements

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. Other Hazard which are not included in the classification criteria

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
Comments : > 97.5 % PVB (CAS: 63148-65-2).

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. Eye contact

Rinse eyes with water as a precaution.

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4.2. Skin contact

Wash skin with plenty of water.

4.3. Inhalation

Remove person to fresh air and keep comfortable for breathing.

4.4. Ingestion

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

4.5. Indication of immediate medical attention and notes for physician

Treat symptomatically.

5. Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- | | |
|--------------------------------|--|
| Suitable extinguishing media | : Use extinguishing media appropriate for surrounding fire.
Water fog.
Foam.
Dry powder.
Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a solid water stream as it may scatter and spread fire. |

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. |
| Reactivity in case of fire | : Avoid formation of dust.
Risk of dust explosion if enriched with fine dust in the presence of air. |

5.3. Special protective equipment and precautions for fire-fighters

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|--------------------------------|--|
| 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 inhalation of dust and 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.
Environmental officer must be informed of all releases.

6.3. Methods and material for containment and cleaning up

Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
Avoid dust formation.
Pick up dust with a vacuum cleaner with HEPA filter.
Do not use compressed air for cleaning.

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7. Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. 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	: 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. Keep container tightly closed. Store in original container.
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8. Exposure controls & personal protection

8.1. Control parameters (e.g. occupational exposure limit values, biological limit values)

polyvinyl butyral (63148-65-2)
No data available
polyvinyl butyral (63148-65-2)
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. 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.
Environmental exposure controls	: Avoid release to the environment.

8.3. Personal protection equipment

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.
Dust production: dust mask with filter type P2.

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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.

Nitrile rubber.

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

Skin and body protection

Wear suitable protective clothing.

EN ISO 13688

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	: No data available
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	: No data available
l) Solubility	: No data available
m) Vapour density	: No data available
n) Relative density	: Not specifically applicable
o) Partition coefficient n-octanol/water (Log Kow)	: No data available
p) Auto-ignition temperature	: No data available
q) Decomposition temperature	: No data available
r) Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
s) Molecular mass	: No data available

Other information

Density	: Not specifically applicable
Relative gas density	: Not specifically applicable
Softening point	: 55 – 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.

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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 dioxide.
Carbon monoxide.

11. Toxicological information

11.1. Information on the likely routes of exposure

Oral	: Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Prolonged inhalation may be harmful.
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 information

Acute toxicity (oral):

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing.
Prolonged inhalation may be harmful.

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:

Causes skin irritation.
Dust can irritate the respiratory tract, skin and eyes.

Serious eye damage/irritation:

Causes serious eye irritation.

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.

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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. Aquatic and terrestrial 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	No data available.
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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))
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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 (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.

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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.

13.2. Disposal precaution

Product/Packaging disposal recommendations : 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 regulated for transport		
14.2. UN proper shipping name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Marine pollutant		
Not regulated	Not regulated	Not regulated
No data available		

14.6. Special precaution which a user to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises

No data available

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	Not 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	Not applicable	
Substance Subject to Submission of PSM	Applicable	123-72-8: butyraldehyde (Flammable liquids) (Manufacture · Handling: 5,000kg (Storage: 200,000kg))

15.2. Chemical Substances Control Act

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

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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 requirements in domestic and other countries

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

Korea Existing Chemicals Inventory (KECI)	Applicable	MOWITAL® SB (KECI-No. : KE-29059) 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)
Priority Existing Chemicals (PEC)	Not 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)	Contains no substance(s) 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

16. Other information

16.1. Information source and references

Information provided by the manufacturer, European Chemicals Agency, <http://echa.europa.eu/>.

16.2. Issue date

9/30/2024

16.3. Revision number and Revision date

Version	: 2.2
Revision date	: 5/6/2025
Department issuing data specification sheet:	: KFT Chemieservice GmbH Im Leuschnerpark 3 D-64347 Griesheim
	Phone: +49 69 305 34 700 Fax: +49 69 305 86 500 SDS Service: +49 69 305 34 740
Contact person	: Saskia Vetter

16.4. Others

No data available

16.5. Indication of changes

Section	SDS changed items	Comments
	General revision	
1	Emergency number	Modified
2	Classification (GHS KR)	Modified
15	Regulatory information	Modified

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.