



# SAFETY DATA SHEET

## 1. Identification

<b>Name of the substance or mixture (trade name)</b>	<b>Mowital</b>
<b>Synonyms</b>	Product grades covered by this safety data sheet see below: * 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,
<b>Major recommended uses for the substance or mixture</b>	For industrial use only. Additive/binder for primer. Coatings. Lacquer. Printing ink.
<b>Specific restrictions for use of the substance or mixture</b>	Not available.
<b>Manufacturer/Importer/Distributor information</b>	
<b>Supplier</b>	
<b>Company name</b>	Kuraray America, Inc.
<b>Address</b>	2625 Bay Area Blvd, Suite 600 Houston, TX 77058-1551 USA
<b>Telephone</b>	+1-800-423-9762 (within USA) +1-281-283-1711 (International)
<b>E-mail</b>	info@kurarayamerica.com
<b>Manufacturer</b>	
<b>Company name</b>	Kuraray Europe GmbH
<b>Address</b>	Philipp-Reis-Str. 4 D-65795 Hattersheim Germany
<b>Telephone</b>	+49-69-305-85300
<b>E-mail</b>	product-safety@kuraray.com
<b>Emergency phone number</b>	For chemical emergency spill, leak, fire, exposure or accident Call CHEMTREC day or night Within USA and Canada: 1-800-424-9300 CCN706984 or +1 703-527-3887 (collect calls accepted)

## 2. Hazards identification

### Classification of the substance or mixture

The classification of the substance or mixture has been performed in accordance with ABNT NBR 14725-2. The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>Environmental hazards</b>	Not classified.

### GHS labeling elements, including precautionary statements

<b>Hazard symbol(s)</b>	None.
<b>Signal word</b>	None.
<b>Hazard statement(s)</b>	The substance does not meet the criteria for classification.
<b>Precautionary statement(s)</b>	
<b>Prevention</b>	Use personal protective equipment as required.
<b>Response</b>	No specific first aid measures noted.
<b>Storage</b>	Store in a dry area. Store in a closed container. Store away from incompatible materials.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.

**Other hazards which do not result in classification** 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.

**Supplemental information** None.

### 3. Composition/information on ingredients

#### Substance

Common chemical name or technical name	CAS number	Concentration or concentration range
Polyvinyl butyral	68648-78-2	> 97.5
Water (Impurity)	7732-18-5	< 2.5
Butyraldehyde (Impurity)	123-72-8	< 0.05
Sodium chloride (Impurity)	7647-14-5	< 0.05

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.  
Polyvinyl butyral can also have CAS no 63148-65-2.

### 4. First-aid measures

#### First-aid measures

**Inhalation** If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

**Most important symptoms/effects, acute and delayed** Contact with dust: Irritation of eyes and mucous membranes. Coughing.

**Personal protection for first-aid responders** If you feel unwell, seek medical advice (show the label where possible).

**Notes to physician** Provide general supportive measures and treat symptomatically.

### 5. Fire-fighting measures

#### Means of fire extinguishing

**Suitable extinguishing media** Water fog. Foam. Dry powder. Carbon dioxide (CO<sub>2</sub>). Apply extinguishing media carefully to avoid creating airborne dust. Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical** Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. During fire, gases hazardous to health may be formed.

**Special fire fighting procedures** Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.

**Protective measures taken by firefighting crews** Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**General fire hazards** The product is not flammable. The product may form dust and can accumulate electrostatic charges, which may cause an electrical spark (ignition source). Use proper grounding procedures.

### 6. Control measures for spills and leaks

#### Personal precautions, protective equipment and emergency procedures

**To be taken by those who are not involved in rendering emergency services** Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. For personal protection, see section 8 of the SDS.

**To be taken by those who are involved in rendering emergency services** Keep unnecessary personnel away. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment.

**Environmental precautions** Environmental manager must be informed of all releases.

**Methods and materials 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 when cleaning. For waste disposal, see section 13 of the SDS.

**Other issues relating to spills and releases** Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**Emergency procedures** Wear appropriate protective equipment and clothing during clean-up.

## 7. Handling and storage

**Precautions for safe handling** Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Provide appropriate exhaust ventilation at places where dust is formed. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges when there is a risk of dust explosion.

Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid inhalation of dust and contact with skin and eyes. Wash hands after handling.

**Conditions for safe storage, including any incompatibilities** Store in original tightly closed container. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Read and follow manufacturer's recommendations.

## 8. Exposure controls/personal protection

**Control parameters** Follow standard monitoring procedures.

### Occupational exposure limits

#### ACGIH

Components	Type	Value	Form
Dust	TWA	10 mg/m <sup>3</sup>	Inhalable particles.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Dust	TWA	3 mg/m <sup>3</sup>	Respirable particles.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Provide sufficient ventilation for operations causing dust formation. Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.

### Personal protective measures

**Eyes and face protection** Risk of contact: Wear approved safety goggles.

#### Skin protection

##### Hand protection

Wear protective gloves.  
In full contact: Glove material: Nitrile rubber. Layer thickness: 0.12 mm. Breakthrough time: >=480 min.  
In splash contact: Glove material: Nitrile rubber Layer thickness: 0.12 mm Breakthrough time: >=480 min.

##### Other

Wear suitable protective clothing. It is a good industrial hygiene practice to minimize skin contact.

#### Respiratory protection

In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

**Physical state** Solid.

**Form** Powder.

**Color** Colorless.

**Odor** Odorless.

<b>Odor threshold</b>	Not available.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	275 - 410 °F (135 - 210 °C)
<b>Initial boiling point and boiling temperature range</b>	Not applicable
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	1.1 (20°C) Approximate.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	No data available.
<b>Auto-ignition temperature</b>	> 716 °F (> 380 °C)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

#### Other physical and chemical parameters

##### Dust explosion properties

**St class** 1

**Molecular formula** (C4H8O.C4H6O2.C2H4O)x

**Molecular weight** 234.25 g/mol

**Oxidizing properties** Not oxidizing.

**Percent volatile** < 2.5 % w/w

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Keep away from heat, sparks and open flame. Contact with incompatible materials. Minimize dust generation and accumulation.
<b>Incompatible materials</b>	Strong acids. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

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

**Skin contact** Dust may irritate skin.

**Eye contact** Dust may irritate the eyes.

**Ingestion** May cause discomfort if swallowed.

**Symptoms** Dust may irritate throat and respiratory system and cause coughing. Direct contact with eyes may cause temporary irritation.

**Acute toxicity** Not expected to be acutely toxic.

**Skin irritation and corrosion** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitization**

<b>Respiratory sensitization</b>	Due to partial or complete lack of data the classification is not possible.
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Toxic to reproduction</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Other information</b>	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	The product is not expected to bioaccumulate.
<b>Partition coefficient n-octanol / water (log Kow)</b>	No data available.
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Considerations on final disposal

### Recommended methods for final destination

<b>Residual waste</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.
<b>Local disposal regulations</b>	Dispose of in accordance with local regulations.

## 14. Transport information

### National regulations

#### ANTT

Not regulated as dangerous goods.

### International regulations

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

### Federal regulations

This chemical product safety data sheet was prepared in accordance with the Brazilian Standard (ABNT NBR 14725-4: (Safety data sheet for chemicals (SDS))).

**Chemical Products for the Manufacture and Synthesis of Narcotics and Psychotropic Subject to Control of the Ministry of Justice (Resolution No. 169 of 15 August 2017, Annex I, List D2)**

Not listed.

**Controlled products that must be reported to the Army (Decree No. 3655, Annex 1, as amended)**

Not applicable.

**Drug precursors (Ordinance No. 1.274)**

Not applicable.

**Ozone depleting substances (Decree No. 99.280, Annexes A, B, C and E, as amended)**

Not applicable.

**POPs (Decree No. 5.472 promulgates the Stockholm Convention on persistent organic pollutants)**

Not listed.

**Use and physiological effects of chemical products (Decree No. 3665, Annex 3)**

Not applicable.

**International regulations**

**Montreal Protocol**

Not applicable.

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

Not applicable.

**Basel Convention**

Not applicable.

**16. Other information**

**Significant information, yet not specifically related to the previous sections** Not available.

**References**

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices  
EPA: AQUIRE database  
HSDB® - Hazardous Substances Data Bank

**Legends and abbreviations**

LD50: Lethal Dose, 50%.  
LC50: Lethal Concentration, 50%.  
EC50: Effective Concentration, 50%.  
TWA: Time weighted average.  
ANTT: National Agency of Land Transport.  
IATA: International Air Transport Association.  
IMDG Code: International Maritime Dangerous Goods Code.  
MARPOL: International Convention for the Prevention of Pollution from Ships.  
STEL: Short term exposure limit.

**Disclaimer**

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