



SAFETY DATA SHEET

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

Name of the hazardous chemical substance or mixture	Mowital
Other means of identification	
Common name(s), synonym(s)	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,
Recommended use of the hazardous chemical substance or mixture, and restrictions of use	
Recommended use	For industrial use only. Additive/binder for primer. Coatings. Lacquer. Printing ink.
Recommended restrictions	None known.
Suppliers details	
Supplier	
Company name	Kuraray America, Inc.
Address	2625 Bay Area Blvd, Suite 600 Houston, TX 77058-1551 USA
Telephone	+1-800-423-9762 (within USA) +1-281-283-1711 (International)
E-mail	info@kurarayamerica.com
Manufacturer	
Company name	Kuraray Europe GmbH
Address	Philipp-Reis-Str. 4 D-65795 Hattersheim Germany
Telephone	+49-69-305-85300
E-mail	product-safety@kuraray.com
Emergency phone number	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)

SECTION 2. Hazard identification

Classification of the substance or mixture	
Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
Elements of labeling, including precautionary statements and warning pictograms	
Hazard symbols	None.
Signal word	None.
Hazard statement	The substance does not meet the criteria for classification.
Precautionary statement	
Prevention	Use personal protective equipment as required.
Response	No specific first aid measures noted.
Storage	Store in a dry area. Store in a closed container. Store away from incompatible materials.
Disposal	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.

SECTION 3. Composition/information on ingredients

Substances

Chemical identity	Common name(s), synonym(s)	CAS number and other unique identifiers	Concentration
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.

SECTION 4. First-aid measures

Description of necessary 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.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry powder. Carbon dioxide (CO₂). 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 protective actions for firefighters 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.

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

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.

SECTION 6. Measures that must be taken in the event of accidental spillage or an accidental leak

Personal precautionary measures, protective equipment and emergency procedure

For non-emergency personnel Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. For personal protection, see section 8 of the SDS.

For emergency responders 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 containing and cleaning up spills or releases

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.

SECTION 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.

SECTION 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

ACGIH Components	Type	Value	Form
Dust	TWA	10 mg/m3	Inhalable particles.
US. ACGIH Threshold Limit Values Components	Type	Value	Form
Dust	TWA	3 mg/m3	Respirable particles.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Control banding approach

Not available.

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.

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

Eye/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.

General hygiene considerations

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

SECTION 9. Physical and chemical properties

Appearance

Not available.

Physical state

Solid.

Form

Powder.

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

SECTION 10. Stability and reactivity

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

SECTION 11. Toxicological information

Information about likely routes of entry

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 related to the physical, chemical and toxicological characteristics	Dust may irritate throat and respiratory system and cause coughing. Direct contact with eyes may cause temporary irritation.

Delayed and immediate effects and also chronic effects from short and long term exposure

Numerical measures of toxicity (such as acute toxicity estimates)

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

SECTION 12. Ecotoxicological information

Toxicity	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.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	The product is not expected to bioaccumulate.
Mobility in soil	No data available.
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.

SECTION 13. Disposal considerations

Disposal methods	
Disposal instructions	Dispose of in accordance with local regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

SECTION 14. Transport information

SCT
Not regulated as dangerous goods.

DOT
Not regulated as dangerous goods.

ADR
Not regulated as dangerous goods.

RID
Not regulated as dangerous goods.

ADN
Not regulated as dangerous goods.

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.

SECTION 15. Regulatory information

Safety, health and environmental regulations specific for the hazard chemical substance or mixture in question This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2015).

Mexico. Substances subject to reporting for the pollutant release and transfer registry (PRTR)

Not listed.

International regulations

Montreal Protocol

Not applicable.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SECTION 16. Other included information relevant to the preparation and updating of safety data sheets

Revision date 29-May-2020

List of abbreviations

LD50: Lethal Dose, 50%.

LC50: Lethal Concentration, 50%.

EC50: Effective Concentration, 50%.

STEL: Short term exposure limit.

TWA: Time weighted average.

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.

SCT: Secretariat of Communications and Transportation (NOM-002-SCT/2011).

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

IATA: International Air Transport Association.

IMDG Code: International Maritime Dangerous Goods Code.

MARPOL: International Convention for the Prevention of Pollution from Ships.

References

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

Disclaimer

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