

1. Chemical product and company identification

Substance name	
Type of product	
Product code	
CAS-No.	
Synonyms	

Mowital® BA
Polymer
200003
70775-95-0
BA 20 S, BA 55 HH

Recommended use of the chemical and restrictions on use

Recommended use

: Industrial use, Temporary binder for ceramics; Coating; Adhesives; 3D Printing; Additive/binder for primer; Printing ink

Company information	
Manufacturer	Distributor
Kuraray Europe GmbH	Kuraray Co., Ltd.
Philipp-Reis-Str. 4	100-0004 Otemachi, Chiyoda-ku Tokiwabashi Tower 2-6-4
65795 Hattersheim am Main	Tokyo, Japan
Germany	Telephone: +81-3-6701-1422
Telephone: +49-69-305-85300	https://www.kuraray.co.jp/inquiry
Technical Contact: +49-69-305-13345	
E-mail: product-safety@kuraray.com	

Emergency telephone number

Emergency number

: +81-3-6701-1422 or +81-3689-08677 (Access Code: 334674)

2. Hazards identification

No labelling applicable

Other hazards which do not result in classification

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.

3. Composition/information on ingredients

Distinction of substance or mixture	: Substance
Chemical name	: polyvinyl butyral acetal
Synonyms	: BA 20 S, BA 55 HH
Comments	: > 97.5 % Polyvinyl butyral acetal (CAS: 70775-95-0).

Name	Concentration (%)	Formula	Reference number in the gazette list		CAS-No.
			CSCL No.	ISHL No.	
polyvinyl butyral acetal (Main constituent)	> 97.5	-	-	-	70775 - 95-0
water (Impurity)	< 2.4	H2O	2-(4)-1220	2-(4)-1220	7732-18-5

Mowital® BA according to JIS Z 7253 : 2019

4. First aid measures

First aid measures First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention. First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. First-aid measures after skin contact : Wash skin with plenty of water. First-aid measures after eye contact : Rinse eyes with water as a precaution. First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell. **Most Important Symptoms/Effects** Symptoms/effects : Dust may irritate the respiratory tract, skin and eyes. Notes to physician Other medical advice or treatment : Treat symptomatically.

5. Fire fighting measures

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire, Water spray, Dry powder, Foam, Carbon dioxide
Unsuitable extinguishing media	: Strong water jet
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.
Reactivity in case of fire	: Avoid formation of dust. Risk of dust explosion if enriched with fine dust in the presence of air.
Hazardous decomposition products in case of fire	: Toxic fumes may be released, Carbon dioxide, Carbon monoxide
Firefighting instructions	: Use ordinary fire-fighting measures, taking into account the hazards from other materials involved. Move containers away from the fire area if this can be done without risk.
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. 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.

6. Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures			
General measures	: Avoid inhalation of dust and contact with skin and eyes.		
For non-emergency personnel			
Emergency procedures	: Ventilate spillage area.		
	Avoid inhalation of dust and contact with skin and eyes.		
For emergency responders			
Protective equipment	: Do not attempt to take action without suitable protective equipment.		
	For further information refer to section 8: "Exposure controls/personal protection".		

Mowital® BA

according to JIS Z 7253 : 2019

Environmental precautions	
Environmental precautions	: Environmental manager must be informed of all releases.
Methods and Equipment for Containment a	nd Cleaning up
Methods for cleaning up	 Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Avoid formation of dust. Pick up dust with a vacuum cleaner with HEPA filter. Do
	not use compressed air for cleaning.
Other information	: Disposal must be done according to official regulations.
7. Handling and storage	
Handling	
Technical measures	: Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.
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.
Prevents handling of incompatible substances or mixtures	: No data available
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Storage	
Storage conditions	 Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store in original tightly closed container.
Material used in packaging/containers	: No data available
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 equipment

Appropriate engineering controls	: Ensure good ventilation of the work station
Protective equipment	
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
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

Mowital® BA

according to JIS Z 7253 : 2019

Eye protection	: Wear closed safety glasses, ISO 16321-1
Skin and body protection	: Wear suitable protective clothing, EN ISO 13688
Environmental exposure controls	: Avoid release to the environment.

9. Physical and chemical properties

Physical state	:	Solid
Appearance	:	Powder
Colour	:	colourless, appearance white
Odour	:	odourless
pН	:	No data available
Relative evaporation rate (butylacetate=1)	:	Not applicable
Melting point	:	No data available
Freezing point	:	Not applicable
Boiling point	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability	:	No data available
Vapour pressure	:	Not applicable
Relative vapour density at 20 $^{\circ}~$ C	:	Not applicable
Relative density	:	No data available
Density	:	No data available
Relative gas density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Explosive properties	:	Product is not explosive.
Explosive limits (vol %)	:	No data available
Oxidising properties	:	Non oxidizing
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
VOC content	:	< 2.5 %
Dust explosion category	:	ST 1 - Weak explosion
Additional information	:	Vicat softening temperature 75 - 85 °C DIN EN ISO 306

10. Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid creating or spreading dust.
Incompatible materials	: Strong acids. Strong oxidizing agent.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Acute toxicity (oral)	: (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: (Based on available data, the classification criteria are not met)

Mowital® BA

according to JIS Z 7253 : 2019

Skin corrosion/irritation	: (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: (Based on available data, the classification criteria are not met
Respiratory sensitization	: No data available
Skin sensitization	: No data available
Respiratory or skin sensitisation	: (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)
STOT-single exposure	: (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: (Based on available data, the classification criteria are not met)
Aspiration hazard	: (Based on available data, the classification criteria are not met)

12. Ecological information

Ecotoxicity

Hazardous to the aquatic environment, short-	: (Based on available data, the classification criteria are not met)
term (acute)	
Hazardous to the aquatic environment, long-	: (Based on available data, the classification criteria are not met)
term (chronic)	

Persistence and degradability

polyvinyl butyral acetal (70775-95-0)	
Persistence and degradability	No data available.

Bioaccumulative potential

polyvinyl butyral acetal (70775-95-0)	
Bioaccumulative potential	No data available

Mobility in soil

polyvinyl butyral acetal (70775-95-0)		
Mobility in soil	No data available	
Hazardous to the ozone layer		
Ozone	: (Based on available data, the classification criteria are not met)	
Other adverse effects		
13. Disposal considerations		
Product/Packaging disposal recommendations	: Recycle or dispose of in compliance with current legislation.	
Waste treatment methods	: Disposal must be done according to official regulations. Do not discharge into drains or the environment.	

14. Transport information

International Regulations

Do not dispose of with domestic waste.

Mowital® BA

according to JIS Z 7253 : 2019

United Nations Recommendations on the Transport of Dangerous Goods (UN RTDG)	Transport by sea (IMDG)	Air transport (IATA)
UN number		
Not applicable	Not applicable	Not applicable
UN proper shipping name		
Not applicable	Not applicable	Not applicable
Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Packing group		
Not applicable	Not applicable	Not applicable
Environmental hazards		
Not applicable	Not applicable	Not applicable
Marine pollutant	: Not applicable	
Regulations in Japan		
Other information	: No supplementary information available	
15. Regulatory information		
National law		
Other information, restriction and prohibition regulations	: Listed on the Japanese ENCS (Existing New Chemical Substances) inventory,Fire Service Act: Designated combustible material (Synthetic resins, others) (Storage limit: 3000 kg)	
16. Other information		
Data sources	: Information provided by the manufacturer. Supplier Safety Data Sheet.	
	in this SDS was obtained from sources whi	ich we believe are reliable. However, the

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable