

## 1. Identification

<b>Product identifier</b>	<b>Mowital</b>
<b>Other means of identification</b>	
<b>Synonyms</b>	Product grades covered by this safety data sheet see below: Thin Film 050, Thin Film 075, Thin Film 100, Thin Film 250
<b>Recommended use</b>	For industrial use only. Laminates with glass, plastics, wood, ceramics, metal, fabrics, textile fibers and combinations therewith.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Supplier</b>	This document is provided as a courtesy to Canadian importers. For onward sale in Canada, the importer's name, Canadian address and telephone number must be incorporated in the SDS.
<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 information</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. Hazard identification

<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	None.
<b>Hazard statement</b>	Exempt (manufactured article).
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices.
<b>Response</b>	No specific first aid measures noted.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Other hazards</b>	Hot or molten material may produce thermal burns.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Substances

Chemical name	Common name and synonyms	CAS number	%
Polyvinyl butyral		68648-78-2	>99

**Composition comments** Polyvinyl butyral can also have CAS no 63148-65-2. All concentrations are in percent by weight.

### 4. First-aid measures

<b>Inhalation</b>	In case of inhalation of fumes from heated product: Move to fresh air.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists. If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.
<b>Eye contact</b>	If exposed to fumes or smoke flush eyes with large amount of water for at least 15 minutes. If irritation occurs, get medical assistance.
<b>Ingestion</b>	Not likely, due to the form of the product.
<b>Most important symptoms/effects, acute and delayed</b>	When heated, the vapours/fumes given off may cause respiratory tract irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Get medical attention if symptoms occur. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ). Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Cool material exposed to heat with water spray and remove it if no risk is involved.
<b>General fire hazards</b>	This product is not flammable. Will burn if involved in a fire.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Ensure adequate ventilation. Use personal protection as recommended in section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Collect for salvage or disposal. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment.

### 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid inhalation of fumes from heated product. Provide adequate ventilation. Avoid contact with hot or molten material. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store away from heat. Keep dry. Store away from incompatible materials. Read and follow manufacturer's recommendations.

### 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).

<b>Appropriate engineering controls</b>	General ventilation normally adequate.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Risk of contact: Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Suitable gloves can be recommended by the glove supplier. When handling hot material, use heat resistant gloves.
<b>Other</b>	Protective clothing is not required under normal conditions.
<b>Respiratory protection</b>	Not necessary under normal conditions.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Film.
<b>Colour</b>	Colourless.
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	Not applicable.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	135 - 210 °C (275 - 410 °F)
<b>Initial boiling point and boiling range</b>	Not applicable
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not flammable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit – upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not applicable.
<b>Relative density</b>	1.1 (20°C) Approximate.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not soluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Auto-ignition temperature</b>	> 380 °C (> 716 °F)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Molecular weight</b>	234.25 g/mol
<b>Oxidising properties</b>	Not oxidising.
<b>Percent volatile</b>	< 1 % 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>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidising agents. Strong acids.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	When heated, the vapours/fumes given off may cause respiratory tract irritation.
<b>Skin contact</b>	Skin irritation is not anticipated when used normally. Hot or molten material may produce thermal burns.
<b>Eye contact</b>	Elevated temperatures or mechanical action may form dust and fumes which may be irritating to the eyes.
<b>Ingestion</b>	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

**Symptoms related to the physical, chemical and toxicological characteristics** When heated, the vapours/fumes given off may cause respiratory tract irritation. When heated, contact with molten product can cause injury and burns.

### Information on toxicological effects

<b>Acute toxicity</b>	Not relevant, due to the form of the product in its manufactured and shipped state.
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.

### Respiratory or skin sensitisation

<b>Respiratory sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Skin sensitisation</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>Reproductive toxicity</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>Further information</b>	None known.

## 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>Mobility in soil</b>	The product is insoluble in water and will sediment in water systems.
<b>Other adverse effects</b>	None known.

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Dispose of in accordance with local regulations.

## 14. Transport information

### TDG

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.

**15. Regulatory information****Canadian regulations****Controlled Drugs and Substances Act**

Not regulated.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Precursor Control Regulations**

Not regulated.

**International regulations****Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto Protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**16. Other information****Issue date**

18-July-2017

**Revision date**

21-August-2019

**Version No.**

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**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. Kuraray cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.