

Safety Data Sheet
Regulation (EC) No. 1907/2006, 1272/2008

Trade Name: PVB Interlayer

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SDS REPORT

WUNING HONGHUI NEW MATERIAL CO., LTD

Wuning Industrial Park, Jiujiang, Jiangxi Province, China.

SDS Report No.	:	SDS2016102102
Compilation Date	:	Oct 21, 2016
Sample Name	:	PVB Interlayer
End Use	:	Interlayer for laminated safety glass
Composition/Ingredient of The Sample	:	See Section 3 on the SDS
Service Requested	:	Safety Data Sheet (SDS) for the sample with submitted composition.
Summary	:	As per request, the contents and formats of the SDS are prepared in accordance with Regulation (EC) No 1907/2006, 1272/2008, Regulation (EU) No 2015/830 and is provided per attached.

**Signed for and on behalf of
Technical Center:**

Jack Mae

SECTION 1: Identification of the substance/mixture and of the company/undertaking

• 1.1 Product identifier

- Trade name: PVB Interlayer
- Product Code: 39209100
- Registration number: Data not available

• 1.2 Relevant identified uses of the substance or mixture and uses advised against on

- Application of the substance/ mixture: Interlayer for laminated safety glass

• 1.3 Details of the supplier of the safety data sheet

• Manufacturer/Supplier:

WUNING HONGHUI NEW MATERIAL CO., LTD

Wuning Industrial Park, Jiujiang, Jiangxi Province, China.

Tel: + (086) 792 2833718

Tel: + (086) 792 2833766

Email: Info@wnhpb.com

- Only Representative/other EU contact point: No specific country, data not available

• Further information obtainable from:

WUNING HONGHUI NEW MATERIAL CO., LTD

• 1.4 Emergency telephone number

Zhou Yu

Tel: + (086) 571 28151135

SECTION 2: Hazards identification

• 2.1 Classification of the substance or mixture

Classification according to regulation (EC) 1272/2008:

The product is not classified according to CLP Regulation.

• Information concerning particular hazards for human and environment:

The product has not to be labeled due to the calculation procedure of Regulation 1272/2008.

• Classification system:

The classification is according to the latest edition of Regulation 1272/2008, and extended by company and literature data.

• 2.2 Label elements

- Labeling according to Regulation (EC) No 1272/2008: Not applicable
- Hazard pictograms: Not applicable
- Signal word: Not applicable
- Hazard-determining components of the labeling: Not applicable
- Hazard statements: Not applicable
- Precautionary statement: Not applicable

• 2.3 Other hazards

• **Results of PBT and vPvB assessment**

PBT: Not applicable

vPvB: Not applicable

SECTION 3: Composition/information on ingredients

• **3.1 Chemical characterization: Mixtures**

• **Description:**

Mixture of the substances listed below with nonhazardous additions.

• Components:		
CAS No.: 63148-65-2	Polyvinyl butyral resin	72%-75%
CAS No.: 94-28-0 EC No.: 202-319-2	2,2'-ethylenedioxydiethyl bis(2-ethylhexanoate)	24%-27%
CAS No.: None	Heat-protecting agent	0.2%-1%
CAS No.: None	Antioxygen	0.1%-0.5%
CAS No.: None	Ultraviolet	0.02%-0.1%

SECTION 4: First aid measures

• **4.1 Description of first aid measures**

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

After inhalation: Supply with fresh air. Call doctor/physician if you feel unwell.

After skin contact: Wash skin with water. If skin irritation occurs: Consult doctor.

After eye contact: Rinse eyes with water. If eye irritation happens: Get medical attention.

After swallowing: Rinse out mouth with water. Call a POISON CENTER or doctor/physician if you feel unwell.

• **4.2 Most important symptoms and effects, both acute and delayed:** No further relevant information available.

• **4.3 Indication of any immediate medical attention and special treatment needed:** No further relevant information available.

SECTION 5: Fire-fighting measures

• **5.1 Extinguishing media**

• **Suitable extinguishing agents:** Alcohol-resistant foam, dry chemical or carbon dioxide, spray water.

• **5.2 Special hazards arising from the substance or mixture:** May produce toxic dust/gas under incomplete combustion.

• **5.3 Advice for firefighters**

Protective equipment:

Mouth respiratory protective device.

SECTION 6: Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Avoid dust/aerosols formation.

Use respiratory protective device against the effects of dust/aerosols.

Keep flame and ignition source away.

• 6.2 Environmental precautions:

Do not allow large quantities of the product to enter sewers/surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

• 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

• 6.4 Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for disposal information.

SECTION 7: Handling and storage

• 7.1 Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Keep away from any ignition source.

Prevent formation of dust/aerosols

Use respiratory protective device against the effects of dust/aerosols.

• Information about fire and explosion protection: *Keep away from flame and ignition source.*

• 7.2 Conditions for safe storage, including any non-compatibility

• Requirements to be met by storerooms and receptacles:

Store in a cool, dry and well-ventilation location.

• Information about storage in one common storage facility:

Keep away from flammable substance.

Keep away from strong acid and strong oxidizing agent.

• Further information about storage conditions:

Store in cool, dry conditions in well-ventilation condition.

• 7.3 Specific end use(s): *No further relevant information available.*

SECTION 8: Exposure controls/personal protection

• 8.1 Control parameters

• Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be

monitored at the workplace.

• **DNELs:** Data not available

• **PNECs:** Data not available

• **Additional information:** The lists valid during the marking were used as basis.

• 8.2 Exposure controls

• **Based on the composition shown in section 3, the following measures are suggested for occupational safety measure.**

• **Appropriate engineering controls:**

Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and at the end of work.

See section 7 for information about design of technical facilities.

• **Personal protective equipment**

• **Respiration protection:** Suitable respiratory protective device recommended.

• **Protection of hands: Protective gloves**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

• **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As composition, the resistance of the glove material can't be calculated in advance and has therefore to be checked prior to the application.

• **Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• **Eye protection:** Safety glasses

• **Environmental exposure controls:**

Control measures must be made in accordance with Community environmental protection legislation.

SECTION 9: Physical and chemical properties

• 9.1 Information on basic physical and chemical properties

• **Appearance:**

Form	Solid-film
Color	Transparent
Odor	Odorless
Odor threshold	Data not available
• pH-value	Data not available
• Change in condition	
Melting point/melting range	165°C -185°C
Boiling point and boiling range	Data not available
• Freezing point	Data not available
• Flash point:	420°C

· Flammability (solid, gas)	Data not available
· Decomposition temperature	Data not available
· Self-ignition	420°C
· Danger of explosion	Product does not present an explosion hazard.
· Explosion limits	
Lower:	Data not available
Upper:	Data not available
· Oxidizing properties	Data not available
· Vapor pressure	Data not available
· Density	1.08g/cm ³
· Relative density	Data not available
· Vapor density	Data not available
· Evaporation rate	Data not available
· Solubility in/Miscibility with	
Water	Insoluble in water
· Partition coefficient (n-octanol/water)	Data not available
· Viscosity	
Dynamic	200 mPa•s -300 mPa•s
Kinematic	Data not available
· 9.2 Other information	Data not available

SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No decomposition if used according to specification.
- **10.2 Chemical stability:** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions:** No further relevant information available.
- **10.4 Conditions to avoid:** High temperature and flame.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No further relevant information available.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity

· LD/LC50 values relevant for classification:

I CAS No.: 94-28-0 2,2'-ethylenedioxydiethyl bis(2-ethylhexanoate)		
Mouse	LD50-oral	>3200mg/kg
Rabbit	LD50-skin	14100uL/kg
Rat	LD50-oral	31000mg/kg
	NOAEL	120-480 mg/kg bw/day
	NOEL	40-120 mg/kg bw/day

- **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
- **Serious eyes damage/ irritation:** Based on available data, the classification criteria are not met.
- **Respiratory or 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.
- **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.

SECTION 12: Ecological information

• 12.1 Toxicity

• Aquatic toxicity:

1 CAS No.: 94-28-0 2,2'-ethylenedioxydiethyl bis(2-ethylhexanoate)	
Predicted No-Effect Concentration	Freshwater: 38.7 µg/L
	Marine water: 3.87 µg/L
	Sewage treatment plant: 1.94 g/L
	Sediment (freshwater): 88.78 mg/kg sediment dw
	Sediment (marine water): 8.88 mg/kg sediment dw
Short-term toxicity to fish	LC50 (4 days) 97 mg/L
Short-term toxicity to aquatic invertebrates	EC50 (4 days) 97 mg/L
	EC50 (48 h) 38.7 mg/L
	EC50 (24 h) 59.3 mg/L
	LC50 (48 h) 1.8 mg/L
Toxicity to aquatic algae and cyanobacteria	EC100 (48 h) 59.3 mg/L
	EC50 (72 h) 55.9 mg/L NOEC (72 h) 27.3 mg/L

• 12.2 Persistence and degradability:

1 CAS No.: 94-28-0 2,2'-ethylenedioxydiethyl bis(2-ethylhexanoate)
Readily biodegradable

• 12.3 Bio-accumulative potential:

1 CAS No.: 94-28-0 2,2'-ethylenedioxydiethyl bis(2-ethylhexanoate)
Log Pow=6.1 at 25 °C and pH 7

• 12.4 Mobility in soil: No further relevant information available.

• 12.5 Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

• 12.6 Other adverse effects: No further relevant information available.

• 12.7 Additional ecological information

• **General notes:** Water hazard class 1 (German Regulation) (self-assessment): Slightly hazardous for water.

Do not allow large quantities of the product to reach ground water, water course or sewage system.

SECTION 13: Disposal consideration

• 13.1 Waste treatment methods

• **Recommendation:** Small quantities of the product can be disposed together with household garbage. Try

to recycle

- **13.2 Un-cleaned packaging**
- **Recommendation:** Dispose of contents/container in according to the local/regional/national/international regulation.

SECTION 14: Transport information

• 14.1 UN-Number ADR, IMDG, IATA	Not regulated
• 14.2 UN proper shipping name ADR, IMDG, IATA	Not applicable
• 14.3 Transport hazard class (es) ADR, IMDG, IATA Class Label	Not applicable Not applicable
• 14.4 Packing group ADR, IMDG, IATA	Not applicable
• 14.5 Marine pollution	No
• 14.6 Special precautions for user	Not applicable
• 14.7 UN "Model Regulation"	-

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **MAK (German Maximum Workplace Concentration):** None of the ingredients is listed.
- **Directive 2012/18/EU**
- **Named dangerous substances- ANNEX I:** None of the ingredients is listed.
- **National regulations.**
- **Water hazard class:** Water hazard class 1 (German Regulation) (self-assessment): Slightly hazardous for water.
- **Other regulations, limitations and prohibitive regulations**
- **SVHC Candidate list of REACH Regulation Annex XIV Authorization (17/12/2015):** None of the ingredients is listed.
- **REACH Regulation Annex XVII Restriction (16/2/2016):** None of the ingredients is listed.
- **REACH Regulation Annex XIV Authorization List (14/8/2014):** None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safe Assessment has not been carried out.

SECTION 16: Other information

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, 1272/2008 and Regulation (EU) No 2015/830.

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

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· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

PBT: Persistent, Bio accumulative and Toxic

SVHC: Substance of Very High Concern

LD50: Lethal dose, 50 percent

LC50: Lethal concentration, 50 percent

NOAEL: No Observed Adverse Effect Level

NOEL: No Effect Level

EC50: Concentration of maximal effect, 50 percent

NOEC: No observed effect concentration

End of SDS