

Printing date 2021-12-01 Revision: 2021-12-01

# 1 Identification of the substance/mixture and of the company/undertaking

- · Product identifier
- · Trade name: Polyvinyl Butyral (PVB)
- **Applicable Models:**

B02HX, B03HX, B04HX, B05HX, B06HX, B08Ac, B08HX, B14Ac, B14HX, B17Ac, B17HX, B18HX, B08LX, B18FSC, B18FG, B08MX, B05SY, B06SY, B08SY, B20LY

· CAS Number:

63148-65-2

- · Relevant identified uses of the substance or mixture and uses advised against :
- · Identified/Recommended uses:

Raw Material for:

Laminated glass

Coating

Binder

Printing inks

Adhesive

- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Chang Chun Petrochemical Co. Ltd.

7th Fl., No. 301, SongJiang Rd.

Taipei City, 104070, TAIWAN

Tel: +886-2-2500-1800 Fax: +886-2-2501-8317

www.ccpgp.com

- · Further information obtainable from: SDS-info@ccp.com.tw
- Emergency telephone number: During normal opening times: +886 2 2500 1800 (8:30-17:30; GMT+8)

# 2 Hazards identification

· Classification of the substance or mixture:

The substance is not classified as hazardous according to the Globally Harmonised System (GHS).

- · Label elements:
- · Hazard pictograms: None (Not Required) Not Regulated/Not Hazardous
- · Signal word: None (Not Required) Not Regulated/Not Hazardous
- · Hazard statements: None (Not Required) Not Regulated/Not Hazardous
- · Other hazard: Powdered material may form explosive dust-air mixtures.

# 3 Composition/information on ingredients

- · Chemical characterisation: Substances
- · CAS No. Description

63148-65-2 Ployvinyl Butyral Resin >97%

· Non-Hazardous Component(s):

 Substance Name:
 CAS NO:
 %

 Polyvinyl Butyral Resin
 63148-65-2
 >97%

 Water
 7732-18-5
 ≤3%

# 4 First aid measures

- Description of first aid measures
- General information:

No special measures required.

First aider needs to protect himself.

· After inhalation: Supply fresh air; consult doctor in case of complaints.

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#### · After skin contact:

Rinse cautiously with water for several minutes.

After contact with the molten product, cool rapidly with cold water.

Cover wound with a sterile dressing.

Never pull off the molten material from the wound.

Burns caused by molten material require medical treatment.

If skin irritation continues, consult a doctor.

# After eye contact:

Rinse opened eye for several minutes under running water.

Rinse opened eye for 15 minutes under running water. If symptom persists consult a doctor.

#### · After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

#### Most important symptoms and effects, both acute and delayed:

No known chronic or acute health risks.

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eye, skin, nose, and throat.

#### Indication of any immediate medical attention and special treatment needed

Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

# **5 Firefighting measures**

- · Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- Special hazards arising from the substance or mixture

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Forms explosive mixtures with air at elevated temperatures.

Minimum ignition temperature of a dust (layer or cloud): 390 °C

Minimum ignition energy (MIE):95 (46 - 240) mJ

#### Advice for firefighters

#### Protective equipment:

Wear protective fire fighting clothing (including fire fighting helmet, coat, trousers, boots, and gloves).

Wear self-contained respiratory protective device.

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves).

#### · Additional information

Avoid contact with skin, eye, and clothing.

Do not inhale explosion gases or combustion gases.

#### 6 Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

If possible, stop flow of product.

Ensure adequate ventilation

Use respiratory protective device against the effects of fumes/dust/aerosol.

Avoid formation of dust.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Pick up and arrange disposal without creating dust.

Pick up mechanically.

Sweep and shovel.



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#### 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.

# 7 Handling and storage

· Handling:

#### Precautions for safe handling

Wear protective gloves/protective clothing/eye protection/face protection.

Use local exhaust ventilation if dust and aerosol are formed during handling.

Any unavoidable deposit of dust must be regularly removed.

No special measures required.

Use personal protective equipment as required.

#### Information about fire - and explosion protection:

No special measures required.

Normal measures for preventive fire protection.

When suspended in air, dust can pose an explosion hazard.

If fine dust will be generated during processing:

Avoid dust deposit, remove dust regularly.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

· Storage:

#### · Conditions for safe storage, including any incompatibilities

Store in a cool location.

Store in cool, dry place in tightly closed receptacles.

Further information about storage conditions: None.

# 8 Exposure controls/personal protection

## · Additional information about design of technical facilities:

If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.

Local exhaust ventilation may be necessary for some operations.

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

# · Control parameters

# Ingredients with limit values that require monitoring at the workplace: 63148-65-2 Ployvinyl Butyral Resin PEL (USA) Long-term value: 15 mg/m³ TWA (Total Dust) Long-term value: 10 mg/m³ TWA (Inhalable Particles)

## Ingredients with biological limit values:

The product does not contain any relevant quantities of materials with biological limited values that have to be monitored.

#### Personal protective equipment:

#### General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Do not eat, drink, smoke or sniff while working.

Avoid skin contact with the liquefied material.

## Respiratory protection:

Not necessary if room is well-ventilated.

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Required when dusts are generated. Short term filter device: Fresh air mask Filter A/P2

#### · Protection of hands:



Protective gloves

The selected protective gloves have to satisfy the specifications of standard EN 374 or its equivalent. Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility etc) is noticed.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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#### · Material of gloves

Plastic gloves

Rubber 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.

#### 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: Not required.

#### · Body protection:

Protective work clothing

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Crystalline powder

Colour: White Codour: Light

• Odour threshold: Not determined. • pH-value: Not applicable.

· Change in condition

Melting point/freezing point: >110 °C Initial boiling point and boiling range: Undetermined.

Flash point: Not applicable - Not flammable/Noncombustible

Evaporation rate Not applicable.

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# Safety Data Sheet according to Globally Harmonized System (GHS)

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• Flammability (solid, gas): Product is not flammable.

· Ignition temperature: not determined

· Decomposition temperature: 350 °C

· Auto-ignition temperature: Not determined.

Self-ignition temperature: > 380 °C

Explosive properties: Dust Explosion Class ST1 (Weak explosion)

Explosion limits:

**Lower:** 0.02 g/L (dust concentration)

Upper:

Vapour pressure:

Density at 20 °C:
Relative density
Vapour density
Vapour density
Evaporation rate

Not determined.
Not determined.
Not applicable.
Not applicable.

· Solubility in / Miscibility with

water: Insoluble.

• Partition coefficient: n-octanol/water: 0.830 log POW

· **Viscosity:** No information available.

Dynamic: Not applicable.

Kinematic: Not applicable.

· Organic solvents: 0.0 % · VOC (EC) 0,00 % · Solids content: 97.0 %

# 10 Stability and reactivity

- · Reactivity: When properly handled and stored, no dangerous reaction is known.
- · Chemical stability: This product is stable under prescribed use and storage.
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions:

No dangerous reactions known.

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

· Conditions to avoid:

Protect from heat. Keep ignition sources away.

Avoid static discharge.

- · Incompatible materials: Strong oxidizing agents
- · Hazardous decomposition products:

Aldehyde

Alcohol

Carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>)

Decomposition products depend upon temperature, air supply and the presence of other materials.

# 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity

Not classified based on available data. LD50 (oral): >5000 mg/kg BW (rat)



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#### · Skin corrosion/irritation:

Not classified due to lack of data.

Dust particles may mechanically irritate the skin/eye.

# Serious eye damage/eye irritation:

Not classified due to lack of data.

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eye, skin, nose, and throat.

- · Respiratory or skin sensitization: Not classified based on available data.
- Germ Cell Mutagenicity: Not classified due to lack of data.
- Carcinogenicity: Not classified due to lack of data.
- · Reproductive Toxicity: Not classified due to lack of data.
- Specific Target Organ Toxicity Single Exposure (STOT SE): Not classified due to lack of data.
- Specific Target Organ Toxicity Repeated Exposure (STOT RE): Not classified due to lack of data.
- · Aspiration Hazard:

Not classified due to lack of data.

Based on physical properties, not likely to be an aspiration hazard.

- · Primary irritant effect:
- · Skin corrosion/irritation No irritating effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.

## 12 Ecological information

- · Toxicity
- · Aquatic toxicity:

Not classified due to lack of data.

For similar material(s):

This product is not soluble in water.

No toxicity up to the limit of solubility.

The EC50 value is above the water solubility.

- · Persistence and degradability Not easily biodegradable
- · Bioaccumulative potential

Bioaccumulation is unlikely.

Due to this product is insoluble and not degradable, bioavailability will be very low.

- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

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

· Other adverse effects No further relevant information available.

#### 13 Disposal considerations

- · Waste treatment methods
- Recommendation

Recover or recycle if possible.

Contact waste processors for recycling information.

On the basis of the necessary technical regulations and after consultation with the disposal agent and the relevant authorities, can be disposed of with domestic waste or incinerated with domestic waste.

Any disposal method should also comply with national, regional, provincial, and local laws.

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· Uncleaned packaging:

· Recommendation:

Packaging may be reused or recycled after cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Disposal must be made according to official regulations.

# 14 Transport information

· Dangerous Goods classification Status: Not classified as a dangerous good with respect to transport

regulations (IMDG, IATA, ADN, ADR, US DOT).

· UN-Number

· ADR, ADN, IMDG, IATA None (Not a Dangerous Good)

· UN proper shipping name

· ADR, ADN, IMDG, IATA None (Not a Dangerous Good)

· Transport hazard class(es)

· ADR, ADN, IMDG, IATA

· Class None (Not a Dangerous Good)

· Packing group

· ADR, IMDG, IATA None (Not a Dangerous Good)

· Environmental hazards:

· Marine pollutant: No

Special precautions for user Not applicable.

• UN "Model Regulation": None (Not a Dangerous Good)

## 15 Regulatory information

#### · Status of global inventories:

All component(s) within this product is listed or exempted from the following country's chemical inventory:

USA – TSCA

Australia - AICS

Canada - DSL

China - IECSC

EU - EINECS/NLP

Japan – ENCS

Korea – KECI

New Zealand - NZIoC

Philippines – PICCS

Taiwan - TCSI

# 16 Other information

#### Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

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

VOC: Volatile Organic Compounds (USA, EU)

Sources

Most toxicological and eco-toxicological data are obtained from European Chemical Agency (ECHA)'s public dissemination website.

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#### General Disclaimers:

CCP Group recommends that all the users/customers/recipients to study this Safety Data Sheet (SDS) carefully and understand all the data or any potential hazards associated with this product. Please consult with appropriate expert if necessary. The information herein is provided in good faith and is believed to be accurate on the date of issue. No warranty, expressed or implied, is given. It is the customer's/user's responsibility to ensure that they are complying with local, regional, state, provincial, and/or national laws in using this product, as regulatory requirement may differ at each level. It is also the customer's/user's responsibility to determine the necessary condition required for using this product safely, as actual operating or usage conditions are beyond CCP Group's control. CCP Group will not be responsible for any SDS obtained from elsewhere other than from CCP Group. If you are unsure whether the SDS you have is current or have obtained the SDS from another source; please contact us to obtain the latest version.

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