QINGDAO SANHUAN COLORCHEM CO., LTD.

17 FLOOR, YUHENG BUILDING, NO.170
XUZHOU NORTH ROAD, QINGDAO, CHINA
EMAIL: michael@cncolorchem.com
TEL:0086 532 88978177/88978188
FAX:0086 532 88962988/88967877
WEBSITE: www.cncolorchem.com

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name： Polyvinyl butyral

Reference Number： 000000000916

Company Information：

QINGDAO SANHUAN COLORCHEM CO., LTD.

17 FLOOR, YUHENG BUILDING, NO.170, XUZHOU NORTH ROAD, QINGDAO, CHINA

Tel: +86-532-88978177/88978188

Fax: +86-532-88962988

Email:michael@cncolorchem.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	Average concentration	Concentration range	Units
polyvinyl butyral	63148-65-2	96.0		%
diethyl butyral	26254-89-7		<=2.0	%
water	7732-18-5		<=2.0	%

3.0 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Form： granular,solid

Colour： white

Odour： characteristic

WARNING STATEMENTS

WARNING!

Combustible dust

May cause eye irritation

POTENTIAL HEALTH EFFECTS

Likely routes of exposure： eye and skin contact, inhalation, ingestion

Eye contact： Moderately irritating to eyes.

Dust may cause eye irritation as would any foreign material.

Skin contact：No more than slightly irritating to skin.
No more than slightly toxic if aboraded.

Inhalation： No information available.

Ingestion： No more than slightly toxic if swallowed.
Significant adverse health effects are not expected to develop if only small amounts (less than a mouthful) are swallowed.

Refer to Section 11 for toxicological information.

4. FIRST AID MEASURES

If in eyes： Immediately flush with plenty of water.
If easy to do, remove any contact lenses.
Get medical attention if irritation persists.
Remove material from skin and clothing.

If on skin： immediate first aid is not likely to be required.
This material can be removed with water.
Wash heavily contaminated clothing before reuse.

If inhaled： Immediate first aid is not likely to be required.
If symptoms occur, remove to fresh air.
Remove material form eyes, skin and clothing.

If swallowed： Immediate first aid is not likely to be required.
A physician or Poison Control Center can be contacted for advice.
Wash heavily contaminated clothing before reuse.

5. FIRE FIGHTING MEASURES

Flash point： combustible material

Hazardous products of combustion： butyraldehyde; butyric acid; acrolein; crotonaldehyde; carbon

monoxide

Extinguishing media： Water spray, foam, dry chemical, or carbon dioxide

Unusual fire and explosion hazards： None known

Fire fighting equipment： Firefighters, and others exposed, wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

Miscellaneous advice： This material may contain enough fines to form an explosive mixture if mixed with a sufficient quantity of air.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions： Use personal protection recommended in section 8.

Environmental precautions： Keep out of drains and water courses.

Methods for cleaning up： In case of spill, do not blow material, Use vacuum equipment designed specifically for handling combustible dusts. Flush spill area with water.

Refer to Section 13 for disposal information and Sections 14 and 15 for reportable quantity information.

7. HANDLING AND STORAGE

Handling

Keep away from heat, sparks, and flame.

Avoid creating dust cloud in handling, transfer and clean-up.

Avoid contact with eyes.

Wash thoroughly after handling.

Emptied containers retain vapour and product residue, Observe all recommended safety precautions until container is cleaned, reconditioned or destroyed. Do not cut, drill, grind or weld on or near this container. The reuse of this material's container for non industrial purposes is prohibited and any reuse must be in consideration of the data provided in this material safety data sheet.

Storage：

General： Keep in a cool, dry, well ventilated place.

Stable under normal conditions of handling and storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

17 FLOOR, YUHENG BUILDING, NO.170 XUZHOU NORTH ROAD, QINGDAO, CHINA
TEL:0086 532 88978177/88978188 FAX:0086 532 88962988/88967877
EMAIL: michael@cncolorchem.com WEBSITE: www.cncolorchem.com

Eye protection： Wear chemical goggles.

Have eye flushing equipment available.

Hand protection： Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice.

Wearing protective gloves is recommended.

Consult the glove/clothing manufacturer to determine the appropriate type glove/clothing for a given application.

Body protection： Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice.

Wash contaminated skin thoroughly after handling.

Respiratory protection： Avoid breathing dust.

Use approved respiratory protection equipment (full facepiece recommended) when airborne exposure limits are exceeded.

If used, full facepiece replaces the need for face shield and/or chemical goggles.

Consult the respirator manufacturer to determine the appropriate type of equipment for a given application.

Observe respirator use limitations specified by the manufacturer.

Ventilation： Provide natural or mechanical ventilation to minimize exposure.

If practical, use local mechanical exhaust ventilation at sources of air contamination such as processing equipment.

Airborne exposure limits： (ml/m^3=ppm)

OSHA and /or ACGIH have not established specific exposure limits for this material.

However, they have established limits for particulates not otherwise regulated (PNOR) and particulates not otherwise classified (PNOC) respectively, which are the least stringent exposure limits applicable to dusts.

OSHA PEL： 15mg/m^3 (total dust) 8-hr TWA

OSHA PEL： 5mg/m^3 (respirable) 8-hr TWA

ACGIH TLV： 10mg/m^3 (total dust) 8-hr TWA

ACGIH TLV： 3mg/m^3 (respirable) 8-hr TWA

17 FLOOR, YUHENG BUILDING, NO.170 XUZHOU NORTH ROAD, QINGDAO, CHINA
TEL:0086 532 88978177/88978188
FAX:0086 532 88962988/88967877
EMAIL: michael@cncolorchem.com
WEBSITE: www.cncolorchem.com

Components referred to herein may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

9. PHYSICAL AND CHEMICAL PROPERTIES

Density： 0.22-0.5 g/cm^3 (bulk density)

Softening point： 140-200℃

VOC Content： 2.8%;

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

10.STABILITY AND REACTIVITY

Conditions to avoid: All sources of ignition.

High humidity

Elevated temperatures

Materials to avoid Hazardous reactions: Contact with strong oxidizing agents.

Hazardous polymerization does not occur.

Decomposition temperature: 100℃

Hazardous decomposition products: butyraldehyde; butyric acid; acrolein; crotonaldehyde; carbon monoxide (CO)

11. TOXICOLOGICAL INFORMATION

This product has not been tested for toxicity, but data obtained on similar products are summarized below:

Acute animal toxicity data

Oral: LD50, rat, > 10,000 mg/kg, Practically nontoxic following oral administration.

Dermal: LD50, rabbit, > 7,940 mg/kg, practically nontoxic after skin application in animal studies.

Eye irritation: rabbit, Slightly irritating to eyes (rabbit), 24h

Skin irritation: rabbit, Slightly irritating to skin (rabbit),24h

Muragenicity: The active ingredient generally produced no genetic changes in standard tests using bacterial and yeast cells.

17 FLOOR, YUHENG BUILDING, NO.170 XUZHOU NORTH ROAD, QINGDAO, CHINA
TEL:0086 532 88978177/88978188
FAX:0086 532 88962988/88967877
EMAIL: michael@cncolorchem.com
WEBSITE: www.cncolorchem.com

12. ECOLOGICAL INFORMATION

Qingdao Haocheng industrial co., ltd has not conducted environmental toxicity or biodegradation studies with this material.

13. DISPOSAL CONIDERATIONS

US EPA RCRA Status: This material when discarded is not a hazardous waste as that term is defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261.

Disposal considerations: Landfill
Incineration
Recycle

Miscellaneous advice: Local, state, provincial, and national disposal regulations may be more or less stringent.Consult your attorney or appropriate regulatory officials for information on such disposal.
This product should not be dumped, spilled, rinsed or washed into sewers or public waterways.

14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

Not regulated for transport.

15. REGULATORY INFORMATION

Non hazardous chemical, no special labeling is required.

16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.