

# SDS Report

No.: CANEC2002385401

Date: 13 Mar 2020

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NINGBO PAIR HARDWARE INDUSTRIAL TRADE CO., LTD.

NO.27, LANE 777, QINGFENG ROAD, CICHENG TOWN,JIANGBEI DISTRICT NINGBO, ZHEJIANG,CHINA

SGS Job No. : CP20-006433  
 Sample Name : Polyurethane prepolymer  
 Country of Origin : CHINA  
 End Uses : Polyurethane elastomers  
 Composition/Ingredient of sample (as per client submission) : See section 3 Composition/information on ingredients on the SDS report  
 Job Receiving Date : 08 Mar 2020  
 SDS Preparation Period : 08 Mar 2020-13 Mar 2020  
 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 US Regulations Relating to Labor 29 CFR 1910.1200, and is provided per attached.

## Remark:

The SDS is prepared based on the information provided by client.

\* This sample is likely to be classified as article and is out of scope of a SDS as set out in 29 CFR Part 1910.1200. This SDS is generated for client's reference only.

Signed for and on behalf of  
 SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch



Zm guan  
 Approved Signatory



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Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

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# Safety Data Sheet

## 29 CFR 1910.1200

Printing date 03/13/2020



Version number 1

Reviewed on 03/10/2020

### 1 Identification

- **Product identifier**
- **Trade name:** Polyurethane prepolymer
- **Recommended use of the chemical and restrictions on use:**
- **Application of the substance / the preparation:** Polyurethane elastomers
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** NINGBO PAIR HARDWARE INDUSTRIAL TRADE CO., LTD.
- **Full address:**  
NO.27, LANE 777, QINGFENG ROAD, CICHENG TOWN,JIANGBEI DISTRICT NINGBO, ZHEJIANG,CHINA
- **Phone number:** 0574-87195856
- **Email:** joy@china-pair.com
- **Other U.S. contact point:** Not available
- **Further information obtainable from:** NINGBO PAIR HARDWARE INDUSTRIAL TRADE CO., LTD.
- **Emergency telephone number:**  
Poison Center  
Tel: +1 800 222 1222
- **Reference Number:** CANEC2002385401,CP20-006433
- **Remark:**  
\* This sample is likely to be classified as article product and is out of scope of a SDS as set out in 29 CFR Part 1910.1200. This SDS is generated for client's reference only.

### 2 Hazard(s) identification

- **Classification of the substance or mixture**  
Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200)
- 
**GHS08 Health hazard**  
  
 Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 Carc. 2 H351 Suspected of causing cancer.  
 STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
- 
**GHS07**  
  
 Skin Irrit. 2 H315 Causes skin irritation.  
 Eye Irrit. 2A H319 Causes serious eye irritation.  
 Skin Sens. 1 H317 May cause an allergic skin reaction.
- **Information concerning particular hazards for human and environment:**  
The product has to be labeled due to the calculation procedure of OSHA Hazard Communication Standard (29 CFR 1910.1200).
- **Classification system:**  
The classification is according to the latest edition of OSHA Hazard Communication Standard (29 CFR 1910.1200), and extended by company and literature data.

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- **Label elements**
- **Labelling according to OSHA Hazard Communication Standard (29 CFR 1910.1200)**
- **Hazard pictograms**



GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**  
*4,4'-methylenediphenyl diisocyanate*
- **Hazard statements**  
*H315 Causes skin irritation.*  
*H319 Causes serious eye irritation.*  
*H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.*  
*H317 May cause an allergic skin reaction.*  
*H351 Suspected of causing cancer.*  
*H373 May cause damage to organs through prolonged or repeated exposure.*
- **Precautionary statements**  

|                       |   |
|-----------------------|---|
| <i>P201</i>           | <i>Obtain special instructions before use.</i>  |
| <i>P202</i>           | <i>Do not handle until all safety precautions have been read and understood.</i>  |
| <i>P260</i>           | <i>Do not breathe dust/fume/gas/mist/vapors/spray.</i>  |
| <i>P264</i>           | <i>Wash thoroughly after handling.</i>  |
| <i>P272</i>           | <i>Contaminated work clothing must not be allowed out of the workplace.</i>   |
| <i>P280</i>           | <i>Wear protective gloves/protective clothing/eye protection/face protection.</i>   |
| <i>P284</i>           | <i>[In case of inadequate ventilation] wear respiratory protection.</i>   |
| <i>P302+P352</i>      | <i>If on skin: Wash with plenty of water.</i>   |
| <i>P304+P341</i>      | <i>If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.</i>                            |
| <i>P305+P351+P338</i> | <i>If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</i> |
| <i>P308+P313</i>      | <i>IF exposed or concerned: Get medical advice/attention.</i>   |
| <i>P321</i>           | <i>Specific treatment (see on this label).</i>  |
| <i>P314</i>           | <i>Get medical advice/attention if you feel unwell.</i>   |
| <i>P362+P364</i>      | <i>Take off contaminated clothing and wash it before reuse.</i>   |
| <i>P333+P313</i>      | <i>If skin irritation or rash occurs: Get medical advice/attention.</i>   |
| <i>P337+P313</i>      | <i>If eye irritation persists: Get medical advice/attention.</i>  |
| <i>P342+P311</i>      | <i>If experiencing respiratory symptoms: Call a poison center/doctor.</i>   |
| <i>P363</i>           | <i>Wash contaminated clothing before reuse.</i>   |
| <i>P405</i>           | <i>Store locked up.</i>   |
| <i>P501</i>           | <i>Dispose of contents/container in accordance with local/regional/national/international regulations.</i>                              |
- **Hazards not otherwise classified (HNOC)** *No further relevant information available.*

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:**  
*Mixture of the substances listed below with nonhazardous additions.*  
*For the wording of the listed hazard statements refer to Section 16.*

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|                       |   |        |
|-----------------------|---|--------|
| <b>· Composition:</b> |   |        |
| 29860-47-7            | Ether of 2-ethyl-2-(hydroxymethyl)propane-1,3-diol and tris[alpha-hydro-omega-hydroxy-poly(oxyethylene)]  | 86.25% |
| 101-68-8              | 4,4'-methylenediphenyl diisocyanate<br>⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335 | 10%    |
| 3806-34-6             | O,O'-dioctadecylpentaerythritol bis(phosphite)  | 3%     |
| 7440-69-9             | bismuth   | 0.75%  |

### 4 First-aid measures

· **Description of first aid measures**

· **General description:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

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

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Fire-fighting measures

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture:**

During heating or in case of fire poisonous gases are produced.

· **Special protective equipment and precautions for firefighters**

· **Protective equipment:** Mouth respiratory protective device.

### 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures:**

Mount respiratory protective device.

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

### 7 Handling and storage

· **Precautions for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

For the general occupational hygienic measures refer to Section 8.

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- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

### 8 Exposure controls/personal protection

- **Components with limit values that require monitoring at the workplace:**

#### 101-68-8 4,4'-methylenediphenyl diisocyanate (10%)

|           |   |
|-----------|---|
| PEL (USA) | Ceiling limit value: 0.2 mg/m <sup>3</sup> , 0.02 ppm   |
| REL (USA) | Long-term value: 0.05 mg/m <sup>3</sup> , 0.005 ppm<br>Ceiling limit value: 0.2* mg/m <sup>3</sup> , 0.02* ppm<br>*10-min |
| TLV (USA) | Long-term value: 0.051 mg/m <sup>3</sup> , 0.005 ppm  |

- **Regulatory information**  
 PEL (USA): Guide to Occupational Exposure Values (OSHA PELs)  
 REL (USA): Guide to Occupational Exposure Values (NIOSH RELs)  
 TLV (USA): Guide to Occupational Exposure Values (ACGIH)
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure.**
- **Appropriate engineering controls:**  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Store protective clothing separately.  
 Avoid contact with the eyes and skin.  
 See Section 7 for information about design of technical facilities.
- **Personal protective equipment:**
- **Breathing equipment:**  
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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 the product is a preparation of several substances, the resistance of the glove material can not 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.

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## · Eye protection:



Tightly sealed goggles

### 9 Physical and chemical properties

## · General Information

## · Appearance:

|                 |               |
|-----------------|---------------|
| Form:           | Solid         |
| Color:          | Transparent   |
| Odor:           | Little odor   |
| Odor threshold: | Not available |

· pH-value: Not available

## · Change in condition

|  |               |
|--|---------------|
| Melting point/Freezing point:            | Not available |
| Initial boiling point and boiling range: | Not available |

· Flash point: Not available

· Flammability (solid, gaseous): Not available

· Auto-Ignition temperature: Not available

· Decomposition temperature: Not available

## · Explosion limits:

|        |               |
|--------|---------------|
| Lower: | Not available |
| Upper: | Not available |

· Vapor pressure: Not available

· Density: Not available

· Relative density: Not available

· Vapor density: Not available

· Evaporation rate: Not available

## · Solubility in / Miscibility with

Water: Not available

· Partition coefficient (n-octanol/water): Not available

## · Viscosity:

|            |               |
|------------|---------------|
| Dynamic:   | Not available |
| Kinematic: | Not available |

· Other information No further relevant information available.

### 10 Stability and reactivity

· Reactivity: Data not available

· Chemical stability: Data not available

· Possibility of hazardous reactions: No dangerous reactions known.

· Conditions to avoid: No further relevant information available.

· Incompatible materials: No further relevant information available.

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· **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

· **Acute toxicity:**· **LD/LC50 values that are relevant for classification:****101-68-8 4,4'-methylenediphenyl diisocyanate**

Oral LD50 2,200 mg/kg (mouse)

· **Skin corrosion/irritation:** Irritant to skin and mucous membranes.· **Serious eye damage/irritation:** Irritating effect.· **Respiratory or skin sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

· **Carcinogenic categories**· **IARC (International Agency for Research on Cancer)**

101-68-8 4,4'-methylenediphenyl diisocyanate

3

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

### 12 Ecological information

· **Toxicity**· **Aquatic toxicity:** No further relevant information available.· **Persistence and degradability:** No further relevant information available.· **Bioaccumulative potential:** No further relevant information available.· **Mobility in soil:** No further relevant information available.· **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

· **Waste treatment methods**· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**· **Recommendation:** Disposal must be made according to official regulations.

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### 14 Transport information

|   |                |
|---|----------------|
| · UN-Number   |                |
| · DOT, IMDG, IATA   | Not applicable |
| · UN proper shipping name   |                |
| · DOT, IMDG, IATA   | Not applicable |
| · Transport hazard class(es)  |                |
| · DOT, IMDG, IATA   |                |
| · Class   | Not applicable |
| · Label   | -              |
| · Packing group   |                |
| · DOT, IMDG, IATA   | Not applicable |
| · Environmental hazards:  |                |
| · Marine pollutant:   | No             |
| · Special precautions for user  | Not applicable |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable |
| · UN "Model Regulation":  | Void           |

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

#### · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

#### · Section 313 (Specific toxic chemical listings):

101-68-8 4,4'-methylenediphenyl diisocyanate

#### · TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

#### · Proposition 65

##### · Chemicals known to cause cancer:

None of the ingredients is listed.

##### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

##### · Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

##### · Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

##### · New Jersey Right-to-Know List:

101-68-8 4,4'-methylenediphenyl diisocyanate

##### · New Jersey Special Hazardous Substance List:

None of the ingredients is listed.

##### · Pennsylvania Right-to-Know List:

101-68-8 4,4'-methylenediphenyl diisocyanate

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**· Pennsylvania Special Hazardous Substance List:**

101-68-8 4,4'-methylenediphenyl diisocyanate

E

**· Cancerogenity categories****· EPA (Environmental Protection Agency)**

101-68-8 4,4'-methylenediphenyl diisocyanate

D, CBD

**· TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

**· NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**16 Other information****· Relevant hazard statements**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

\*\*\*\*\*

The contents and format of this SDS are in accordance with 29 CFR 1910.1200.

**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.

**Remark:**

\* This sample is likely to be classified as article product and is out of scope of a SDS as set out in 29 CFR Part 1910.1200. This SDS is generated for client's reference only.

**· Date of preparation / last revision 03/13/2020 / -****· Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety &amp; Health

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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End of document