

# SAFETY DATA SHEET



Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013

Date of issue/Date of revision 10 August 2025

Version 3.02

## Section 1. Chemical product and company identification

**Product code** : 95-819  
**Product name** : PITTHANE ULTRA COMPONENT B  
**Product name** : PITTHANE ULTRA COMPONENT B  
**Product type** : Liquid.

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Industrial applications.  
**Use of the substance/  
mixture** : Coating. Paints. Painting-related materials.  
**Uses advised against** : Not applicable.

**Supplier's details** : PPG Coatings (Kunshan) Co., Ltd  
53 Jinyang Road, Lujia Town,  
215331 Kunshan City, Jiangsu Province, P.R. China  
Tel: 86 512 57678859 Fax: 86 512 57678857

**Emergency telephone  
number (with hours of  
operation)** : 00 86 532 83889090

## Section 2. Hazards identification

**Classification of the substance or mixture according to GB 30000.1-2024 and GB 30000-2013**

### Emergency overview

Liquid.

May be harmful if swallowed or in contact with skin.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause respiratory irritation.

IF INHALED: Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice or attention.

**See Section 12 for environmental precautions.**

**Classification of the  
substance or mixture** : ACUTE TOXICITY (oral) - Category 5  
ACUTE TOXICITY (dermal) - Category 5  
ACUTE TOXICITY (inhalation) - Category 4  
SKIN SENSITIZATION - Category 1  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract  
irritation) - Category 3

### GHS label elements

## Section 2. Hazards identification

**Hazard pictograms**

:

**Signal word**

: Warning

**Hazard statements**

: May be harmful if swallowed or in contact with skin.  
May cause an allergic skin reaction.  
Harmful if inhaled.  
May cause respiratory irritation.

**Precautionary statements****Prevention**

: Wear protective gloves. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Contaminated work clothing should not be allowed out of the workplace.

**Response**

: **IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. **IF SWALLOWED:** Call a POISON CENTER or doctor if you feel unwell. **IF ON SKIN:** Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse.

**Suitable extinguishing media**

: Use an extinguishing agent suitable for the surrounding fire.

**Storage**

: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Disposal**

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Physical and chemical hazards**

: No known significant effects or critical hazards.

**Health hazards**

: May be harmful if swallowed or in contact with skin. May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation.

**Symptoms related to the physical, chemical and toxicological characteristics****Eye contact**

: No specific data.

**Inhalation**

: Adverse symptoms may include the following:  
respiratory tract irritation  
coughing

**Skin contact**

: Adverse symptoms may include the following:  
irritation  
redness

**Ingestion**

: No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure****Short term exposure****Potential immediate effects**

: Not available.

**Potential delayed effects**

: Not available.

**Long term exposure**

## Section 2. Hazards identification

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Environmental hazards : No known significant effects or critical hazards.

Other hazards which do not result in classification : None known.

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture

### CAS number/other identifiers

CAS number : Not applicable.

| Ingredient name   | %                    | CAS number             |
|---|----------------------|------------------------|
| Hexamethylene diisocyanate, oligomers.<br>hexamethylene-di-isocyanate | 70 - 100<br>0.1 - <1 | 28182-81-2<br>822-06-0 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Harmful if inhaled. May cause respiratory irritation.
- Skin contact** : May be harmful in contact with skin. May cause an allergic skin reaction.
- Ingestion** : May be harmful if swallowed.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.

## Section 4. First aid measures

- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon oxides  
nitrogen oxides  
Cyanate and isocyanate.  
hydrogen cyanide
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Special provisions** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

## Section 7. Handling and storage

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

## Section 7. Handling and storage

Do not reuse container.

**Conditions for safe storage, including any incompatibilities** : Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Precautions should be taken to minimize exposure to atmospheric humidity or water. CO<sub>2</sub> will be formed, which, in closed containers, could result in pressurization.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Hexamethylene-di-isocyanate

**GBZ 2.1 (China, 7/2024)**

PC-TWA 8 hours: 0.03 mg/m<sup>3</sup>.

**Recommended monitoring procedures** : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye protection** : Safety glasses with side shields.

#### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Gloves** : butyl rubber

## Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use an air-fed respirator unless a site-specific assessment determines that an air-fed respirator is not necessary, in which case the results of the risk assessment should be utilized to determine whether respiratory protection is necessary and what type of protection is appropriate. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Boiling point** : >37.78°C (>100°F)
- Flash point** : Closed cup: 166.11°C (331°F)
- Evaporation rate** : 0 (butyl acetate = 1)
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : 0 kPa (0 mm Hg)
- Relative density** : 1.17

**Solubility(ies)**

| Media      | Result            |
|------------|-------------------|
| cold water | Partially soluble |

**Viscosity**

- ☒ Dynamic (room temperature): Not available.  
Kinematic (room temperature): Not available.  
Kinematic (40°C): >21 mm<sup>2</sup>/s

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : In a fire, hazardous decomposition products may be produced.
- Incompatible materials** : Keep away from: oxidizing agents, strong alkalis, strong acids, amines, alcohols, water. Uncontrolled exothermic reactions occur with amines and alcohols.
- Hazardous decomposition products** : Depending on conditions, decomposition products may include the following materials: Cyanate and isocyanate. carbon oxides nitrogen oxides hydrogen cyanide

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                | Result                                  | Dose                            |
|--|---|---------------------------------|
| Hexamethylene diisocyanate, oligomers. | Rat - Female - Oral - LD50              | >2500 mg/kg                     |
| -                                      | Rabbit - Dermal - LD50                  | >2000 mg/kg                     |
| hexamethylene-di-isocyanate            | Rat - Oral - LD50                       | 0.71 g/kg                       |
| -                                      | Rabbit - Dermal - LD50                  | 0.57 g/kg                       |
| -                                      | Rat - Inhalation - LC50 Vapor           | 151 mg/m <sup>3</sup> [4 hours] |
| -                                      | Rat - Inhalation - LC50 Dusts and mists | 124 mg/m <sup>3</sup> [4 hours] |

**Product Conclusion** : There are no data available on the mixture itself.

#### Skin corrosion/irritation

**Conclusion/Summary** : There are no data available on the mixture itself.

#### Serious eye damage/eye irritation

**Conclusion/Summary** : There are no data available on the mixture itself.

#### Respiratory corrosion/irritation

**Conclusion/Summary** : There are no data available on the mixture itself.

#### Sensitization

##### Skin

**Conclusion/Summary** : There are no data available on the mixture itself.

##### Respiratory

**Conclusion/Summary** : There are no data available on the mixture itself.

#### Mutagenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

#### Carcinogenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

#### Reproductive toxicity

**Conclusion/Summary** : There are no data available on the mixture itself.

#### Specific target organ toxicity (single exposure)

| Product/ingredient name                | Result  |
|--|---|
| Hexamethylene diisocyanate, oligomers. | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)<br>(Respiratory tract irritation) - Category 3 |
| hexamethylene-di-isocyanate            | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)<br>(Respiratory tract irritation) - Category 3 |

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : Harmful if inhaled. May cause respiratory irritation.

**Skin contact** : May be harmful in contact with skin. May cause an allergic skin reaction.

**Ingestion** : May be harmful if swallowed.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.



## Section 11. Toxicological information

- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

- Conclusion/Summary** : There are no data available on the mixture itself.
- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Product/ingredient name                | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|--|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| PITTHANE ULTRA COMPONENT B             | 2503.5       | 2503.5         | N/A                      | 11.0                       | 1.5                                 |
| Hexamethylene diisocyanate, oligomers. | 2500         | 2500           | N/A                      | 11                         | 1.5                                 |
| hexamethylene-di-isocyanate            | 710          | 570            | N/A                      | 3                          | 0.5                                 |

#### Other information :

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Repeated exposure may lead to permanent respiratory disability. Moisture-sensitive material.

## Section 12. Ecological information

### Toxicity

| Product/ingredient name               | Result                                       | Species  | Dose / Exposure   |
|---------------------------------------|--|--|---|
| Hexamethylene diisocyanate, oligomers | Acute - LC50<br>Acute - EC50<br>Acute - EC50 | Fish - <i>Danio rerio</i> (zebra fish)<br>Daphnia - <i>daphnia magna</i><br>Algae - <i>scenedesmus subspicatus</i> | >100 mg/l [96 hours]<br>>100 mg/l [48 hours]<br>>1000 mg/l [72 hours] |

**Conclusion/Summary** : Not available.

### Persistence/degradability

**Conclusion/Summary** : Not available.

| Product/ingredient name                | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| Hexamethylene diisocyanate, oligomers. | -                 | -          | Not readily      |

### Bioaccumulative potential

| Product/ingredient name                | LogP <sub>ow</sub> | BCF | Potential |
|--|--------------------|-----|-----------|
| Hexamethylene diisocyanate, oligomers. | 5.54               | 3.2 | Low       |
| hexamethylene-di-isocyanate            | 0.02               | -   | Low       |

### Mobility in soil

**Soil/Water partition coefficient** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

|                             | China           | UN              | IMDG            | IATA            |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|
| UN number                   | Not regulated.  | Not regulated.  | Not regulated.  | Not regulated.  |
| UN proper shipping name     | -               | -               | -               | -               |
| Transport hazard class(es)  | -               | -               | -               | -               |
| Packing group               | -               | -               | -               | -               |
| Environmental hazards       | No.             | No.             | No.             | No.             |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. | Not applicable. |

Additional information

**CN** : None identified.  
**UN** : None identified.  
**IMDG** : None identified.  
**IATA** : None identified.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not applicable.

Section 15. Regulatory information

**China inventory (IECSC)** : All components are listed or exempted.

**References** : Production Safety Law of the People's Republic of China  
 Code of Occupational Disease Prevention of the People's Republic of China  
 Environmental Protection Law of the People's Republic of China  
 Fire Control Law of the People's Republic of China  
 Regulations on the Control over Safety of Dangerous Chemicals  
 Occupational exposure limits for hazardous agents in the workplace chemical hazardous agents (GBZ2.1)  
 Specification for classification and labelling of chemicals according to Part 1: General rules (GB 30000.1-2024)  
 Safety data sheet for chemical products - Content and order of sections (GB/T16483)  
 Guidance on the compilation of safety data sheet for chemical products (GB/T17519)  
 General rule for preparation of precautionary label for chemicals (GB15258)  
 Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB30000.2-29)

## Section 16. Other information

### History

|                                |   |
|--------------------------------|---|
| Date of issue/Date of revision | : 10 August 2025  |
| Version                        | : 3.02  |
| Date of previous issue         | : 4/19/2024   |
| First issue date               | : 7/21/2016   |
| Prepared by                    | : EHS   |
| Key to abbreviations           | : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway<br>ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road<br>ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IMDG = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail<br>UN = United Nations |



Indicates information that has changed from previously issued version.

### Notice to reader

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.