

1. Identification of the substance/preparation and of the company/undertaking

Product name: Tacusil PUA508 Black Part B

Manufacturer/Importer/Distributor Representative Company

Kitpackers Trading (Huizhou) Co., Ltd.
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Emergency information: International – Chemtrec: 01-703-527-3887 (24 hours.)

2. Hazards identification

Classification of the substance or mixture according to GHS

<u>Hazard Class</u>	<u>Hazard Category</u>	<u>Route of Exposure</u>	<u>Target organ</u>
Acute toxicity	Category 4	Inhalation	
Skin corrosion/irritation	Category 2		
Serious eye damage/eye irritation	Category 2A		
Respiratory sensitizer	Category 1		
Skin sensitizer	Category 1		
Carcinogenicity	Category 2		
Specific target organ toxicity – single exposure	Category 3		respiratory tract irritation
Specific target organ toxicity – repeated exposure	Category 2		

Label elements according to GHS:

Hazard pictogram:



Signal word: Danger

Hazard statement:	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.
Prevention:	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. P284 [In case of inadequate ventilation] wear respiratory protection.
Response:	P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340+P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Get medical advice/attention. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.
Storage:	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
Disposal:	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

3. Composition / information on ingredients

General description: Mixture

Hazard component CAS-No.	Content	GHS Classification
Silicon dioxide 112945-52-5	10-40%	Not Classified
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	70-85%	Acute toxicity 4; Inhalation H332 Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 2A H319 Respiratory sensitizer 1 H334 Skin sensitizer 1 H317 Carcinogenicity 2 H351 Specific target organ toxicity – single exposure 3 H335 Specific target organ toxicity – repeated exposure 2 H373

4. First aid measures

Skin contact:	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). For severe exposures, get under safety shower after removing clothing, then get medical attention. For lesser exposure, seek medical attention if irritation develops or persists after area is washed. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye contact:	Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours.
Ingestion:	Do not induce vomiting. Rinse the mouth. Drink 1-2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

5. Fire fighting measures

Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Hydrogen cyanide. Isocyanate vapors Toxic fumes. Irritating vapors.
Extinguishing media:	Foam, dry chemical or carbon dioxide.
Fire-fighting method:	In case of fire, keep containers cool with water spray.
Notice and measures for firing fighting:	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. During a fire, MDI vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion.

6. Accidental release measures

Emergency measures:	Do not allow product to enter sewer or waterways.
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Clean-up methods:	<p>Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up.</p> <p>If temporary control of isocyanate vapor is required, a blanket of protein foam (available at most fire departments) may be placed over spill.</p> <p>Large quantities may be pumped into closed, but not sealed containers for disposal.</p> <p>For minor spills, absorb isocyanates with sawdust or other absorbent, shovel into suitable unsealed containers, transport to well ventilated area (outside) and treat with neutralizing solution: mixture of 80% water and 20% non-ionic surfactant Tergitol TMN-10; or 90% water, 3-8% concentrated ammonia and 2% detergent.</p> <p>Add about ten parts of neutralizer per part of isocyanate, with mixing.</p> <p>Allow to stand uncovered for 48 hours to let carbon dioxide escape.</p> <p>Decontaminate floor with decontamination solution letting stand for at least 15 minutes.</p>
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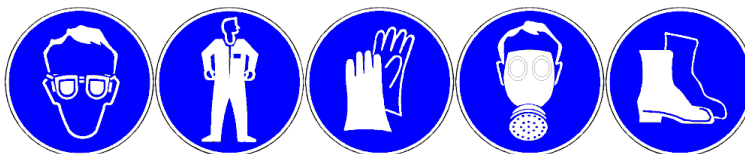
7. Handling and storage

Notice for handling:	<p>Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling.</p> <p>Exposure to vapors of heated MDI can be extremely dangerous.</p> <p>Use only with adequate ventilation.</p> <p>Keep container closed.</p>
Notice for storage:	Refer to Technical Data Sheet

8. Exposure controls / personal protection

Control parameters	
Exposure limit values	Not available
Engineering controls:	Use only in well ventilated areas.
Respiratory protection:	<p>Concentrations greater than the TLV can occur when MDI is sprayed, heated or used in a poorly ventilated area.</p> <p>In such cases, or whenever concentrations of MDI exceed the TLV, respiratory protection must be worn.</p> <p>Observe OSHA regulations for respirator use (29 CFR 1910.134).</p> <p>A positive pressure, supplied-air respirator or a self-contained breathing apparatus is recommended.</p> <p>In situations where MDI is not sprayed, heated, or used in a poorly ventilated area, and a supplied-air or self-contained breathing apparatus is unavailable or its use impractical, at least an air-purifying cartridge and particulate pre-filters must be worn.</p> <p>However, this should be permitted only for short periods of time (less than one hour) at relatively low concentrations (at or near the TLV).</p> <p>However, due to the poor warning properties of MDI, proper fit and timely replacement of filter elements must be ensured.</p>
Eye protection:	Safety goggles or safety glasses with side shields.
Body protection:	Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.
Hand protection:	Suitable protective gloves.
Other protection:	The selection of PPE shall at least compliant with "Law of the People's Republic of China on Prevention and Control of Occupational Diseases" and "Code of practice for selection of personal protective equipments" (GB/T 11651-2008).

Pictograms for recommended PPE:



9. Physical and chemical properties

Physical state:	liquid	Appearance:	Brown
Evaporation rate:	Not available.	Odor:	Slight, aromatic
pH:	Not available.	Melting point:	Not available.
Boiling point:	Not available.	Density:	1.21 g/cm ³
Vapor density:	Not available.	Vapor pressure:	Not available.
Flash point:	Not available.	Ignition temperature:	Not available.
Lower explosive limit:	Not available.	Upper explosive limit:	Not available.
Solubility in water	Insoluble	Viscosity:	360cps.
Auto-ignition temperature:	Not available.	Flammability:	Not available.
Octanol / water distribution coefficient:	Not available.	Decomposition temperature:	Not available.

10. Stability and reactivity

Stability:	Stable under normal conditions of storage and use.
Conditions to avoid:	Contamination with water. Keep away from heat, ignition sources and incompatible materials.
Incompatible products:	Water. Amines. Strong bases. Alcohols. Will cause some corrosion to copper alloys and aluminum.
Decomposition products:	Oxides of carbon. Oxides of nitrogen. Hydrogen cyanide. Isocyanates. Toxic fumes. Irritating vapors.
Hazardous polymerization:	Contact with moisture, other materials that react with isocyanates, or temperatures above 350° F (177° C), may cause polymerization.

11. Toxicological information

General toxicological information:

No laboratory animal data available.

Inhalative toxicity:

Acute toxicity estimate (ATE) : 1.52 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: Calculation method

Other remarks:

Not available.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	LD50 LD50	> 2,000 mg/kg > 9,400 mg/kg	oral dermal		rat rabbit	other guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	sensitising	Respirator y sensitisation	guinea pig	not specified
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation/ Exposure time	Species	Method
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	negative	bacterial reverse mutation assay (e.g Amestest)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	negative	inhalation		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	NOAEL=0,2 mg/m ³	inhalation: aerosol	2 y 6 h/d, 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity/ Carcinogenicity Studies)

12. Ecological information**General ecological information:**

Do not empty into drains / surface water / ground water.

Ecotoxicity:

No data available.

Other adverse effects:

Not available.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	LC50	> 1,000 mg/l	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)

Persistence and degradability:

Not available.

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	5.22					not specified

13. Disposal considerations

- Product disposal:** Dispose of in accordance with local and national regulations.
- Disposal of uncleaned packages:** After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

14. Transport information

Road transport TDG:

Not dangerous goods

Marine transport IMDG:

Not dangerous goods

Air transport IATA:

Not dangerous goods

Notice For Transportation:

Transport according to local and national regulations. Ensure containers will not leak, collapse, or being damaged when transported. DO NOT transport with incompatible materials. Transportation vehicle should be equipped with right fire-fighting equipment in case of emergency. Avoid solarization, drenched and high temperature when transported.

15. Regulatory information

The following laws and regulations lay down provisions in terms of chemicals safety use, storage, transportation, loading/unloading, classification as well as symbol.

“Law of the People's Republic of China on Work Safety”

“ Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases”

“Regulation on the Safety Management of Hazardous Chemicals”

“Regulations on License to Work Safety”

16. Other information

Disclaimer:

This Safety Data Sheet has been generated in accordance with Chinese law only. It provides information on the chemical product in the aspects of safety, health, environment, etc, recommending preventive and protective measures and countermeasures in case of emergency. The information contained herein does not constitute a guarantee concerning the properties of the material. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export.