

**SECTION 1: Identification of the substance/mixture and of the company****Product Identifier**

Product Name: PowerCure™ BP

Chemical Name: Benzophenone

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

Relevant applications identified For Industrial Use

**Details of the supplier of the safety data sheet****Company**

TinToll Performance Materials Co., Ltd.

4F, Building 01, Xincheng Technology Park, No. 69

Olympic Avenue, Nanjing, China

Email: SDS@Tintoll.com

**Emergency Telephone Number:** +86-25-8468-0091**SECTION 2: Hazardous identification****Summary of emergency**

flakes white May be harmful if swallowed or in contact with skin., May cause cancer., May cause damage to organs (Liver, Kidney) through prolonged or repeated exposure if swallowed., Toxic to aquatic life., Harmful to aquatic life with long lasting effects. Show this material safety data sheet to the doctor in attendance. After inhalation: fresh air. Call in physician. In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician. After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses. After swallowing: immediately make victim drink water (two glasses at most). Consult a physician. Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapors possible in the event of fire. Violent reactions possible with: Strong oxidizing agents

**GHS Classification**

Acute toxicity, Oral (Category 5), H303

Acute toxicity, Dermal (Category 5), H313

Carcinogenicity (Category 1B), H350

Specific target organ toxicity - repeated exposure, Oral (Category 2), Liver, Kidney, H373

Short-term (acute) aquatic hazard (Category 2), H401

Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

**GHS Label elements, including precautionary statements**



Pictogram

Signal Word

Danger

Hazard statement(s)

H303 + H313

May be harmful if swallowed or in contact with skin.

H350

May cause cancer.

H373

May cause damage to organs (Liver, Kidney) through prolonged or repeated exposure if swallowed.

H401

Toxic to aquatic life.

H412

Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

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.

P273

Avoid release to the environment.

P280

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

Response

P312

Call a POISON CENTER/ doctor if you feel unwell.

Storage

P405

Store locked up.

Disposal

P501

Dispose of contents/ container to an approved waste disposal plant.

**Reduced Labeling (<= 125 ml)**



Pictogram

Signal Word

Danger

Hazard statement(s)

H303 + H313

May be harmful if swallowed or in contact with skin.

H350

May cause cancer.

H373

May cause damage to organs (Liver, Kidney) through prolonged or repeated exposure if swallowed.

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H401 Toxic to aquatic life.  
 H412 Harmful to aquatic life with long lasting effects.  
 Precautionary statement(s) none

### Physical and chemical hazards

Referring to current information, no physical or chemical hazard.

### Health hazards

H303 May be harmful if swallowed.  
 H313 May be harmful in contact with skin.  
 H350 May cause cancer.  
 H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

### Environmental hazards

H401 Toxic to aquatic life.  
 H412 Harmful to aquatic life with long lasting effects.

**Other hazards** - none

## SECTION 3: Composition/information on ingredients

Substance / Mixture: Substance  
**Substances**  
 Synonyms: Diphenyl ketone  
 Formula: C<sub>13</sub>H<sub>10</sub>O  
 Molecular weight: 182.22 g/mol  
 CAS-No. : 119-61-9  
 EC-No. : 204-337-6

### Hazardous ingredients

Component	Classification	Concentration
Benzophenone derivatives	Acute toxicity Category 5; Carcinogenicity Category 1B; Specific target organ toxicity - repeated exposure Category 2; Short-term (acute) aquatic hazard Category 2; Long-term (chronic) aquatic hazard Category 3; H303, H313, H350, H373, H401, H412	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### Description of first aid measures

#### General advice

Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11

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

No data available

#### Notes to physician

No data available

## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media

Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

#### Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapors possible in the event of fire.

#### Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

#### Environmental precautions

Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area.

Avoid generation of dusts.

#### Reference to other sections

For disposal see section 13.

### SECTION 7: Handling and storage

#### Precautions for safe handling

##### Advice on safe handling

Work under hood. Do not inhale substance/mixture.

##### Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.

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

##### Storage conditions

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

##### Storage class

Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

### SECTION 8: Exposure Controls/Personal Protection

#### Control parameters

##### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

### Exposure controls

#### Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

##### Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

#### Body Protection

protective clothing

#### Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

#### Control of environmental exposure

Do not let product enter drains.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state	flakes
Color	white
Odor	No data available
Melting point/freezing point	Melting point/range: 47 - 51 °C - lit.

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Initial boiling point and boiling range	305 °C - lit.
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	138 °C - closed cup
Auto-ignition temperature	No data available
Decomposition temperature	> 320 °C
pH	No data available
Viscosity	No data available
Water solubility	ca.0.14 g/l at 25 °C
Partition coefficient: n-octanol/water	log Pow: 3.18 at 25 °C - Bioaccumulation is not expected. (Lit.)
Vapor pressure	1.33 hPa at 108 °C
Density	1.11 g/cm <sup>3</sup> at 18 °C
Relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	none
<b>Other safety information</b>	
No data available	

## SECTION 10: Stability And Reactivity

### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

### Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

### Conditions to avoid

Strong heating.

### Incompatible materials

No data available

### Hazardous decomposition products

In the event of fire: see section 5

## SECTION 11: Toxicological Information

### Information on toxicological effects

**Acute toxicity**

LD50 Oral - Mouse - 2,895 mg/kg

(OECD Test Guideline 401)

Inhalation: No data available

LD50 Dermal - Rabbit - 3,535 mg/kg

Remarks: (ECHA)

**Skin corrosion/irritation**

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitization**

Draize Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Sensitization possible in predisposed persons.

**Germ cell mutagenicity**

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: in vitro test

Test system: E. coli

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: (ECHA)

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Test Type: Micronucleus test

Species: Mouse

Application Route: Intraperitoneal injection

Method: OECD Test Guideline 474

Result: negative



### **Carcinogenicity**

Presumed to have carcinogenic potential for humans

### **Reproductive toxicity**

No data available

### **Specific target organ toxicity - single exposure**

No data available

### **Specific target organ toxicity - repeated exposure**

Oral - May cause damage to organs through prolonged or repeated exposure. - Liver, Kidney

### **Aspiration hazard**

No data available

### **Additional Information**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

## SECTION 12: Ecological Effects

### **Toxicity**

Toxicity to fish

flow-through test LC50 - Pimephales promelas (fathead minnow) - 14.2 mg/l - 96.0 h  
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

semi-static test EC50 - Daphnia magna (Water flea) - 6.78 mg/l – 48 h  
(OECD Test Guideline 202)

Toxicity to algae

static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 3.5 mg/l - 72 h  
(OECD Test Guideline 201)

Toxicity to bacteria

static test EC50 - activated sludge - 787 mg/l - 3 h  
(OECD Test Guideline 209)

### **Persistence and degradability**

Biodegradability

aerobic - Exposure time 28 d

Result: 66 - 84 % - Readily biodegradable.

(OECD Test Guideline 301F)

### **Bioaccumulative potential**

No data available

### **Mobility in soil**

No data available

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**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

**Endocrine disrupting properties**

No data available

**Other adverse effects**

Discharge into the environment must be avoided.

### SECTION 13: Disposal considerations

**Waste treatment methods**

**Product:**

Offer surplus and non-recyclable solutions to a licensed disposal company.

### SECTION 14: Transport Information

**UN number**

ADR/RID: -

IMDG: -

IATA: -

**UN proper shipping name**

ADR/RID:

Not dangerous goods

IMDG:

Not dangerous goods

IATA:

Not dangerous goods

**Transport hazard class(es)**

ADR/RID: -

IMDG: -

IATA: -

**Packing group**

ADR/RID: -

IMDG: -

IATA: -

**Environmental hazards**

ADR/RID: no

IMDG Marine Pollutant: no

IATA: no

**Special precautions for user**

no data available

**Incompatible materials**

no data available

**Further information**

Not classified as dangerous in the meaning of transport regulations.

### SECTION 15: Regulatory Information

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

National regulatory information

**Other regulations**

Please pay attention on the waste treatment should also comply with local regulations requirement.

**SECTION 16: Other Information****Full text of H-Statements referred to under sections 2 and 3.**

H303 May be harmful if swallowed.

H313 May be harmful in contact with skin.

H350 May cause cancer.

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

H401 Toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

**Further information**

It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.