# SAFETY DATA SHEET

(EC 1907/2006) PowerCure™ 819

# SECTION 1: Identification of the substance/mixture and of the company

**Product Identifier** 

Product Name: PowerCure™ 819

Chemical Name: Phenylbis(2,4,6-trimethylbenzoyl)phosphineoxide 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**

#### Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin sensitization (Category 1), H317

Long-term (chronic) aquatic hazard (Category 4), H413

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

# Label elements

Labelling according Regulation (EC) No 1272/2008



Pictogram

Signal Word Warning

Hazard statement(s)

H317 May cause an allergic skin reaction.

H413 May cause long lasting harmful effects to aquatic life.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P272 Contaminated work clothing should not be allowed out of the

workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves.



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P302 + P352 IF ON SKIN: Wash with plenty of water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

Supplemental Hazard Statements none

Reduced Labeling (<= 125 ml)



Pictogram

Signal Word Warning

Hazard statement(s)

H317 May cause an allergic skin reaction.

H413 May cause long lasting harmful effects to aquatic life.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P272 Contaminated work clothing should not be allowed out of the

workplace.

P280 Wear protective gloves.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

Supplemental Hazard Statements None

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# **SECTION 3: Composition/information on ingredients**

**Substances** 

Synonyms: Bisacylphosphine oxides

**BAPOs** 

Formula:  $C_{26}H_{27}O_3P$  Molecular weight: 418,46 g/mol CAS-No. : 162881-26-7 EC-No. : 423-340-5

Component	Classification	Concentration
(Phenylphosphoryl)bis(mesitylmethanone)		
CAS-No. 162881-26-7	Skin Sens. 1; Aquatic	<= 100 %
EC-No. 423-340-5	Chronic 4; H317, H413	

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



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## **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.

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. 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

## **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

Oxides of phosphorus

Combustible.

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.

#### **Further information**



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Suppress (knock down) gases/vapors/mists with a water spray jet. 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 inhalation of dusts. 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 dry. 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

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

# Storage conditions

Tightly closed. Dry.

#### Storage class

Storage class (TRGS 510): 11: Combustible Solids

#### Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

## **SECTION 8: Exposure Controls/Personal Protection**

# **Control parameters**

Ingredients with workplace control parameters

#### **Exposure controls**

Personal protective equipment

### Eye/face protection



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

### **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.

Recommended Filter type: Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

### 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 powder Color yellow

Odor No data available

Melting point/freezing point Melting point/range: 131 - 135 °C - lit.

Initial boiling point and boiling range

Flammability (solid, gas)

Upper/lower flammability or

No data available

No data available

explosive limits

Flash point

Auto-ignition temperature

Decomposition temperature

pH

No data available

No data available

No data available

Viscosity

No data available

Water solubility 0,0001 g/l at 20 °C - Regulation (EC) No. 440/2008, Annex,

A.6- insoluble

Partition coefficient: n-octanol/water log Pow: 5,8 at 22 °C - OECD Test Guideline 117 – Potential

bioaccumulation

Vapor pressure < 0,1 hPa at 20 °C - OECD Test Guideline 104

Density 1.190 kg/m³ at 21 °C Relative density No data available



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Relative vapor density

Particle characteristics

No data available

Explosive properties

No data available

Oxidizing properties none

Other safety information

Surface tension 70,7 - 71,4 mN/m at 0,1g/l at 20 °C - Surface tension

# **SECTION 10: Stability And Reactivity**

#### Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### **Chemical stability**

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

### Possibility of hazardous reactions

No data available

#### Conditions to avoid

no information available

#### Incompatible materials

Oxidizing agents, Strong acids, Strong bases

## **Hazardous decomposition products**

In the event of fire: see section 5

# **SECTION 11:Toxicological Information**

#### Information on toxicological effects

### Acute toxicity

LD50 Oral - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 401)

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404)

Serious eye damage/eye irritation



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Eyes - Rabbit

Result: No eye irritation - 72 h (OECD Test Guideline 405)

# Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: positive

(OECD Test Guideline 406)

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

### 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: Chromosome aberration test in vitro

Test system: Human lymphocytes

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

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

Carcinogenicity

No data available

#### Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available

#### **Additional Information**

Endocrine disrupting properties

Product:

Assessment: The substance/mixture does not contain components considered to have endocrine



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disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Repeated dose toxicity - Rat - male and female - Oral - 28 Days - NOAEL (No observed adverse effect level) - 1.000 mg/kg

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

# **SECTION 12: Ecological Effects**

### **Toxicity**

Toxicity to fish

semi-static test LC50 - Danio rerio (zebra fish) - > 0,09 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - > 1,17 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae

static test ErC50 - Desmodesmus subspicatus (green algae) - > 0,26 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria

static test EC50 - activated sludge - > 100 mg/l - 3 h

(OECD Test Guideline 209)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)

semi-static test NOEC - Daphnia magna (Water flea) - >= 0,0081 mg/l - 21 d

(OECD Test Guideline 211)

#### Persistence and degradability

Biodegradability

aerobic - Exposure time 28 d

Result: 1 % - Not biodegradable

(OECD Test Guideline 301B)

#### Bioaccumulative potential

Bioaccumulation

Cyprinus carpio (Carp) - 28 d

at 24,3 °C((Phenylphosphoryl)bis(mesitylmethanone))

Bioconcentration factor (BCF): < 5

(OECD Test Guideline 305)

# Mobility in soil

No data available



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#### Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# **Endocrine disrupting properties**

Product:

Assessment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### Other adverse effects

No data available

# **SECTION 13:Disposal considerations**

#### Waste treatment methods

No data available

# **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

# **SECTION 15:Regulatory Information**

Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.



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# Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

## **Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out.

## **SECTION 16:Other Information**

#### Full text of H-Statements referred to under sections 2 and 3.

H317 May cause an allergic skin reaction.

H413 May cause long lasting harmful effects to aquatic life.

#### **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.

