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

Product Name: PowerCure™ 369  
Chemical Name: 2-Benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone

**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**

Reproductive toxicity (Category 1B), H360D

Short-term (acute) aquatic hazard (Category 1), H400

Long-term (chronic) aquatic hazard (Category 1), H410

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

**Label elements****Labeling according Regulation (EC) No 1272/2008**

Pictogram

Signal Word

Danger

Hazard statement(s)

H360D

May damage the unborn child.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P201

Obtain special instructions before use.

P202

Do not handle until all safety precautions have been read and understood.

P273

Avoid release to the environment.

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P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P391 Collect spillage.

Supplemental Hazard Statements none

Restricted to professional users.

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



Pictogram

Signal Word

Danger

Hazard statement(s)

H360D

May damage the unborn child.

Precautionary statement(s)

P201

Obtain special instructions before use.

P202

Do not handle until all safety precautions have been read and understood.

P280

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

P308 + P313

IF exposed or concerned: 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**

Formula:  $C_{23}H_{30}N_2O_2$

Molecular weight: 366,50 g/mol

CAS-No. : 119313-12-1

EC-No. : 404-360-3

Component	Classification	Concentration
2-benzyl-2-dimethylamino-4-morpholinobutyrophenone Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)		
CAS-No. 119313-12-1 EC-No. 404-360-3	Repr. 1B; Aquatic Acute 1; Aquatic Chronic 1; H360D, H400, H410	<= 100 %

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	M-Factor - Aquatic Acute: 10 M-Factor - Aquatic Chronic: 10	
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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

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

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. 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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides

Nitrogen oxides (NOx)

Combustible.

#### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### Further information

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No data available

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage****Precautions for safe handling****Advice on safe handling**

Avoid formation of dust and aerosols.

**Advice on safe handling**

Avoid exposure - obtain special instructions before use.

**Advice on protection against fire and explosion**

Provide appropriate exhaust ventilation at places where dust is formed.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

For precautions see section 2.

**Conditions for safe storage, including any incompatibilities****Storage conditions**

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

**Storage class**

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

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## SECTION 8: Exposure Controls/Personal Protection

### Control parameters

Ingredients with workplace control parameters

### Exposure controls

### Personal protective equipment

### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

### Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state	powder
Color	No data available
Odor	odorless
Melting point/freezing point	Melting point/range: 116 - 119 °C - lit.
Initial boiling point and boiling range	No data available
Flammability (solid, gas)	No data available

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Upper/lower flammability or explosive limits	No data available
Flash point	113 °C
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	No data available
Viscosity	No data available
Water solubility	0.00025 g/l at 20 °C - OECD Test Guideline 105- slightly soluble
Partition coefficient: n-octanol/water	log Pow: 2,91 at 25 °C - Bioaccumulation is not expected.
Vapor pressure	No data available
Density	1,21 g/cm <sup>3</sup> at 20 °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>	
Surface tension	59,1 mN/m at 20 °C

## SECTION 10: Stability And Reactivity

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

No data available

### Conditions to avoid

No data available

### Incompatible materials

Strong oxidizing agents, Strong acids

### Hazardous decomposition products

In the event of fire: see section 5

## SECTION 11: Toxicological Information

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**Information on toxicological effects**

**Acute toxicity**

LD50 Oral - Rat - male and female - > 5.000 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

(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: No eye irritation

(OECD Test Guideline 405)

**Respiratory or skin sensitization**

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

**Germ cell mutagenicity**

Test Type: Ames test

Test system: S. typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster ovary cells

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**

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May damage the unborn child.

**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 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.

Anorexia., Liver injury may occur., 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) - > 0,142 mg/l - 96 h  
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

semi-static test NOEC - Daphnia magna (Water flea) - 0,21 mg/l - 21 h

Toxicity to algae

static test ErC50 - Pseudokirchneriella subcapitata - > 2 mg/l - 72 h  
(OECD Test Guideline 201)

static test NOEC - Pseudokirchneriella subcapitata - 0,5 mg/l - 72 h  
(OECD Test Guideline 201)

Toxicity to bacteria

static test - activated sludge - > 100 mg/l - 0,5 h  
(OECD Test Guideline 209)

**Persistence and degradability**

Biodegradability

aerobic - Exposure time 28 d

Result: 3 % - Not readily biodegradable.

(OECD Test Guideline 301B)

**Bioaccumulative potential**



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No data available

**Mobility in soil**

No data available

**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**

Very toxic to aquatic life with long lasting effects.

## SECTION 13: Disposal considerations

**Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

**Contaminated packaging**

Dispose of as unused product.

## SECTION 14: Transport Information

**UN number**

ADR/RID: 3077

IMDG: 3077

IATA: 3077

**UN proper shipping name**

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-benzyl-2-dimethylamino-4-morpholinobutyrophenone)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-benzyl-2-dimethylamino-4-morpholinobutyrophenone)

IATA: Environmentally hazardous substance, solid, n.o.s. (2-benzyl-2-dimethylamino-4-morpholinobutyrophenone)





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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.