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

Product Identifier

Product Name: PowerCure™ 651
 Chemical Name: 2,2-Dimethoxy-2-phenylacetophenone

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

powder crystalline white odorless Harmful if swallowed., May cause damage to organs (oral cavity) through prolonged or repeated exposure., 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. Development of hazardous combustion gases or vapors possible in the event of fire. Violent reactions possible with: Strong acids, Strong oxidizing agents

GHS Classification

Acute toxicity, Oral (Category 4), H302
 Specific target organ toxicity - repeated exposure (Category 2), oral cavity, H373
 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	Warning
Hazard statement(s)	
H302	Harmful if swallowed.

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H373	May cause damage to organs (oral cavity) through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
Precautionary statement(s)	
Prevention	
P260	Do not breathe dust.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
Response	
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P314	Get medical advice/ attention if you feel unwell.
Disposal	
P501	Dispose of contents/ container to an approved waste disposal plant.

Reduced Labeling (<= 125 ml)



Pictogram	
Signal Word	Warning
Hazard statement(s)	
H302	Harmful if swallowed.
Precautionary statement(s)	none

Physical and chemical hazards

Referring to current information, no physical or chemical hazard.

Health hazards

H302	Harmful if swallowed.
H373	May cause damage to organs (oral cavity) through prolonged or repeated exposure.
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

H302	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.

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Environmental hazards

H412

Harmful to aquatic life with long lasting effects.

Other hazards - none

SECTION 3: Composition/information on ingredients

Substance / Mixture:

Substance

Substances

Synonyms:

Benzil α,α -dimethyl acetal

α,α -Dimethoxy- α -phenylacetophenone

Formula:

$C_{16}H_{16}O_3$

Molecular weight:

256.3 g/mol

CAS-No. :

24650-42-8

EC-No. :

246-386-6

Hazardous ingredients

Component	Classification	Concentration
2,2-dimethoxy-1,2-diphenylethan-1-one	Acute toxicity Category 4; Specific target organ toxicity - repeated exposure Category 2; Long-term (chronic) aquatic hazard Category 3; H302, H373, H412 M-Factor - Aquatic Acute: 10	<= 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 (CO₂) 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.

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 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

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Hygiene measures

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Light sensitive.

Storage class

Storage class (TRGS 510): 11: Combustible Solids

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

Change contaminated clothing. Preventive skin protection recommended. Wash hands 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

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	powder crystalline
Color	white
Odor	odorless
Melting point/freezing point	Melting point/range: 67 - 70 °C - lit.
Initial boiling point and boiling range	100 - 115 °C at < 0.1 hPa
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	Not applicable
Auto-ignition temperature	> 400 °C at 1,013 hPa
Decomposition temperature	No data available
pH	No data available
Viscosity	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	log Pow: 3.42
Vapor pressure	No data available
Density	No data available
Relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	none

Other safety information

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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 acids

Strong oxidizing agents

Conditions to avoid

no information available

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 - Rat - > 6,000 mg/kg

Acute toxicity estimate Oral - Expert judgment - 500.1 mg/kg

(Expert judgment)

Inhalation: No data available

LD50 Dermal - Rat - > 7,000 mg/kg

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

Remarks: (External MSDS)

Skin - Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

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Result: Not mutagenic in Ames Test.

Remarks: Histidine reversion (Ames)

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure. - oral cavity

Aspiration hazard

No data available

Additional Information

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

SECTION 12: Ecological Effects

Toxicity

No data available

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 26 mg/l - 24 h
(OECD Test Guideline 202)

Toxicity to algae

IC50 - Desmodesmus subspicatus (green algae) - 0.17 mg/l - 72 h
(OECD Test Guideline 201)

Toxicity to bacteria

EC50 - activated sludge - > 100 mg/l - 3 h
(OECD Test Guideline 209)

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

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



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Other adverse effects

No data available

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

Strong oxidizing agents

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.**

H302 Harmful if swallowed.

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

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.