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

Product Identifier

Product Name: PowerCure™ 2EAQ

Chemical Name: 2-Ethylanthraquinone

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, finecrystalline yellow May cause damage to organs (Blood, spleen) through prolonged or repeated exposure if swallowed. Very toxic 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. After eye contact: rinse out with plenty of water.

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 oxidizing agents

GHS Classification

Specific target organ toxicity - repeated exposure, Oral (Category 2), Blood, spleen, H373

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.

GHS Label elements, including precautionary statements

Pictogram

Signal Word: Warning

Hazard statement(s)

H373: May cause damage to organs (Blood, spleen) through prolonged or

repeated exposure if swallowed.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention

P260 Do not breathe dust.

P273 Avoid release to the environment.

Response

P314 Get medical advice/ attention if you feel unwell.

P391 Collect spillage.

Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word Warning

Hazard statement(s)

H373 May cause damage to organs (Blood, spleen) through prolonged or repeated exposure if swallowed.

H410 Very toxic 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

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

Environmental hazards

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Other hazards - none

SECTION 3: Composition/information on ingredients

Substance / Mixture: Substance

Substances

Formula: $C_{16}H_{12}O_2$

Molecular weight: 236,27 g/mol

CAS-No. : 84-51-5

EC-No. : 201-535-4

Hazardous ingredients

Component	Classification	Concentration
2-Ethylanthraquinone		
	Specific target organ toxicity - repeated exposure Category 2; Short-term (acute) aquatic hazard Category 1; Long term (chronic) aquatic hazard Category 1; H373, H400, H410 M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	<= 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.

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_2) 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

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

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

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, finecrystalline

Color	yellow
Odor	No data available
Melting point/freezing point	Melting point/range: 108 - 111 °C - lit.
Initial boiling point and boiling range	400 °C at 994 hPa - OECD Test Guideline 103
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	No data available
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: 4.6 - OECD Test Guideline 117 – Potential bioaccumulation
Vapor pressure	No data available
Density	1.27 g/cm^3 at 21 °C - OECD Test Guideline 109
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

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

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 - male and female - > 2,000 mg/kg

(OECD Test Guideline 401)

Inhalation: No data available

LD50 Dermal - Rabbit - male and female - > 20,000 mg/kg

Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

(OECD Test Guideline 405)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: Does not cause skin sensitization.

(OECD Test Guideline 429)

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 cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: positive

Test Type: Micronucleus test

Species: Rat

Cell type: Bone marrow

Application Route: Gavage

Method: OECD Test Guideline 474

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
Ingestion - May cause damage to organs through prolonged or repeated exposure. - Blood, spleen
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
Toxicity to fish
semi-static test LC50 - Poecilia reticulata (guppy) - > 0.37 mg/l - 96h
(OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates
static test EC50 - Daphnia magna (Water flea) - 0.27 mg/l - 48 h
(OECD Test Guideline 202)
Toxicity to algae
static test ErC50 - Pseudokirchneriella subcapitata (green algae) - >0.28 mg/l - 96 h
(OECD Test Guideline 201)
static test NOEC - Pseudokirchneriella subcapitata (green algae) -0.15 mg/l - 96 h
(OECD Test Guideline 201)
Toxicity to bacteria
static test EC50 - activated sludge - > 100 mg/l - 3 h
(OECD Test Guideline 209)
Persistence and degradability
Biodegradability
aerobic - Exposure time 28 d
Result: 81 % - Readily biodegradable.
(OECD Test Guideline 301D)
Remarks: The 10 day time window criterion is not fulfilled.
Bioaccumulative potential
Bioaccumulation

Cyprinus carpio (Carp) - 7 d
at 25 °C - 0.0135 mg/l(2-Ethylanthraquinone)
Bioconcentration factor (BCF): 560 - 1,350
(OECD Test Guideline 305)

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.

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: 3077 IMDG: 3077 IATA: 3077

UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Ethylanthraquinone)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Ethylanthraquinone)
IATA-DGR: Environmentally hazardous substance, solid, n.o.s. (2-Ethylanthraquinone)

Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

Packing group

ADR/RID: III IMDG: III IATA: III

Environmental hazards

ADR/RID: yes IMDG Marine Pollutant: yes IATA: yes

Special precautions for user

no data available

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids. Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

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.

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

H400 Very toxic to aquatic life.

H410 Very toxic 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.