

Safety Data Sheet
Regulation (EC) No. 1907/2006 and 1272/2008

Printing Date: October 13, 2022

Version No.: 1.0

Revision: October 13, 2022

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

• **1.1 Product identifier**

• **Trade name:**

2,5-furandicarboxylic acid

• **EC No.:**

221-800-8

• **CAS No.:**

3238-40-2

• **Index No.:**

No data available.

• **REACH Registration No.:**

No data available.

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

• **Application of the substance/ mixture:**

Industrial uses, synthetic polyester and polyamide

• **Uses advised against:**

No data available.

• **Reason why uses advised against:**

No data available.

• **1.3 Details of the supplier of the safety data sheet**

• **Manufacturer /Supplier:**

Zhongke Guosheng (Hangzhou) Technology, Co.,Ltd

Room 401, Floor 4, Building 9, No.19 Jugong Road, Xixing Street, Binjiang District, Hangzhou City, Zhejiang Province

Post code: 310000

Tel: +086-571-86777732

Email: wei.chen@guoshengtech.com

National contact: Wei Chen

• **Only Representative/other EU contact point:**

Information not available

• **Further information obtainable from:**

Zhongke Guosheng (Lishui) New Material Technology Co., Ltd

• **1.4 Emergency telephone number**

Tel: +086-571-86777732 (24 hours available)

SECTION 2: Hazards identification

• **2.1 Classification of the substance or mixture**

• **2.1.1 Classification according to regulation (EC) 1272/2008:**

Regulation (EC) No 1272/2008 [CLP]

Eye Irrit. 2, H319

• **2.1.2 Additional information:**

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

• **2.2 Label elements**

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• **Labeling according to Regulation (EC) No 1272/2008:**

The product is labelled according to CLP Regulation.

• **Hazard pictograms:**



GHS07

• **Signal word:**

Warning

• **Hazard statements:**

H319 Causes serious eye irritation

• **Precautionary statement:**

P264 Wash hands and face thoroughly after handling.

P280 Wear eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

• **Supplemental label elements:**

Not applicable

• **2.3 Other hazards**

Substance does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

Substance was not identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100

SECTION 3: Composition/information on ingredients

• **3.1 Substance**

Substance name	CAS No.	EC No.	Index No	w/w %	SCL/ M-factor/ ATE
2,5-furandicarboxylic acid	3238-40-2	221-800-8	-	99.85 Min.	-

• **3.2 Mixture**

Not applicable

SECTION 4: First aid measures

• **4.1 Description of first aid measures**

General advice:

Call a POISON CENTRE/doctor if you feel unwell.

After inhalation:

Supply with fresh air.

Call a POISON CENTRE/doctor if you feel unwell.

After skin contact:

Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

After eye contact:

Rinse cautiously with water for several minutes.

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Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

After swallowing:

Rinse mouth.

Call a POISON CENTRE/doctor if you feel unwell.

• **4.2 Most important symptoms and effects, both acute and delayed:**

Eyes irritation.

• **4.3 Indication of any immediate medical attention and special treatment needed:**

Treatment according to symptoms, no known specific medicine.

SECTION 5: Fire-fighting measures

• **5.1 Extinguishing media**

• **Suitable extinguishing agents:**

Use CO₂, chemical powder, water spray or alcohol resistant foam to extinguish.

• **Unsuitable extinguishing media:**

No special unsuitable extinguishing media.

• **5.2 Special hazards arising from the substance or mixture:**

Carbon monoxide.

• **5.3 Advice for firefighters**

Protective equipment:

Wear self-contained breathing apparatus and special tightly sealed suit (Comply with EN 133).

SECTION 6: Accidental release measures

• **6.1 Personal precautions, protective equipment and emergency procedures**

• **6.1.1 For non-emergency personnel**

Protective equipment:

Eye protection/ face protection/ dust mask.

Emergency procedures:

Evacuate immediately.

Ensure good ventilation.

Avoid breathing dust.

Wear eye protection/ face protection.

Avoid contact with eyes.

• **6.1.2 For emergency responders**

Personal protective equipment:

Eye protection/ face protection/ dust mask.

• **6.2 Environmental precautions:**

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Prevent further leakage or spillage if safe to do so;
Prevent spillage from entering drains, sewer, basement or confined areas;
If the spillage contaminates rivers, lakes or drains inform respective authorities.

· 6.3 Methods and material for containment and cleaning up:

Ensure good ventilation.
Do not flush down the drain.
Dispose contaminated material as waste according to section 13.

· 6.4 Reference to other sections:

See section 7 for information on safe handling;
See section 8 for information on personal protection equipment;
See section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling:

Ensure good ventilation at workplace.
Avoid breathing dust.
Wear eye protection/ face protection.
Avoid contact with eyes.

· Information about fire and explosion protection:

Normal measures for preventive fire protection.

· 7.2 Conditions for safe storage, including any non-compatibility

· Requirements to be met by storerooms and receptacles:

Store in a cool, dry and well-ventilated place.

· Information about storage in one common storage facility:

Keep container tightly closed.

· Further information about storage conditions:

No further requirements.

· Storage class:

13.

· 7.3 Specific end use(s):

See section 1.2.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace: *No available data.*

· DNELs: *No available data.*

· PNECs: *No available data.*

· Additional information:

The lists valid during the marking were used as basis.

· 8.2 Exposure controls

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• **Based on the composition shown in section 3, the following measures are suggested for occupational safety measure.**

• **Appropriate engineering controls:**

Handle in accordance with good industrial hygiene and safety practice;

Wash hands and face before breaks and at the end of work;

See section 7 for information about design of technical facilities.

• **Personal protective equipment**

• **Eye/Face protection:**



Safety glasses, safety goggles, face-shield.

Protective goggles with side-shields.

• **Skin protection**

• **Hand protection:**



Protective gloves

Gloves made from butyl rubber Neoprene™ rubber, nitrile rubber (thickness > 0.11mm; breakthrough times up to 480 minutes).

• **Other skin protection measures:**

Gauntlets, boots, bodysuit are recommended.

• **Respiration protection:**

Dust mask is necessary.

• **Thermal hazards:**

All personal protection equipment must be flame retardant and heat-insulated;

The material must not use flammable material.

• **Environmental exposure controls:**

Control measures must be made in accordance with Community environmental protection legislation.

SECTION 9: Physical and chemical properties

• **9.1 Information on basic physical and chemical properties**

• Physical state	Solid, powder
• Color	White
• Odor & Odor threshold	Odorless
• Melting point/freezing point	>310°C
• Boiling point or initial boiling point and boiling range	419.2±30.0°C at 760mmHg
• Flammability	Not flammable solid
• Lower and upper explosion limit	Not determined
• Flash point	207.3±24.6°C
• Auto-ignition temperature	Not determined
• Decomposition temperature	>250°C
• pH	Not determined
• Kinematic viscosity (mm²/s)	Not determined

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· Solubility	0.899 g/l (20 °C)
· Partition coefficient n-octanol/water (log value)	0.992
· Vapor pressure	Not determined
· Density and/or relative density	1.73 g/cm ³ (20°C)
· Relative vapor density	Not determined
· Particle characteristics	Not determined
· 9.2 Other information	
· 9.2.1 Information with regard to physical hazard classes:	
· Explosives	Not applicable
· Flammable gases	Not applicable
· Aerosols	Not applicable
· Oxidising gases	Not applicable
· Gases under pressure	Not applicable
· Flammable liquids	Not applicable
· Flammable solids	Not applicable
· Self-reactive substances and mixtures	Not applicable
· Pyrophoric liquids	Not applicable
· Pyrophoric solids	Not applicable
· Self-heating substances and mixtures	Not applicable
· Substances and mixtures, which emit flammable gases in contact with water	Not applicable
· Oxidizing liquids	Not applicable
· Oxidizing solids	Not applicable
· Organic peroxides	Not applicable
· Corrosive to metals	Not applicable
· Desensitised explosives	Not applicable
· 9.2.2 Other safety characteristics	
· Mechanical sensitivity	Not applicable
· Self-accelerating polymerisation temperature	Not applicable
· Formation of explosible dust/air mixtures	Not applicable
· Acid/alkaline reserve	Not applicable
· Evaporation rate	Not applicable
· Miscibility	Not applicable
· Conductivity	Not applicable
· Corrosiveness	Not applicable
· Gas group	Not applicable
· Redox potential	Not applicable
· Radical formation potential	Not applicable
· Photocatalytic properties	Not applicable
· Other physical and chemical parameters	Not determined

SECTION 10: Stability and reactivity

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• **10.1 Reactivity:**

The product is non-reactive under normal conditions of use, storage and transport.

• **10.2 Chemical stability:**

Stable under recommended storage conditions.

• **10.3 Possibility of hazardous reactions:**

No known hazardous reaction.

• **10.4 Conditions to avoid:**

No data available.

• **10.5 Incompatible materials:**

Strong oxidizing agents.

• **10.6 Hazardous decomposition products:**

No known hazardous decomposition products.

SECTION 11: Toxicological information

• **11.1 Information on toxicological effects**

• **Acute toxicity:**

Based on available data, the classification criteria are not met.

• **Skin corrosion/irritation:**

Based on available data, the classification criteria are not met.

• **Serious eyes damage/ irritation:**

Causes serious eye irritation.

• **Respiratory or skin sensitization:**

Based on available data, the classification criteria are not met.

• **Germ cell mutagenicity:**

Based on available data, the classification criteria are not met.

• **Carcinogenicity:**

Based on available data, the classification criteria are not met.

• **Reproductive toxicity:**

Based on available data, the classification criteria are not met.

• **STOT-single exposure:**

Based on available data, the classification criteria are not met.

• **STOT-repeated exposure:**

Based on available data, the classification criteria are not met.

• **Aspiration hazard:**

Based on available data, the classification criteria are not met.

11.2 Information on other hazards

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11.2.1 Endocrine disrupting properties:

Substance was not considered to have endocrine-disrupting properties with respect to humans as it meets the criteria set out in section A of Regulation (EU) No 2017/2100.

11.2.2 Other information:

No known other relevant information on adverse health effects.

SECTION 12: Ecological information

• **12.1 Toxicity:**

LC50: >100 mg/L, 96h static (Cyprinus carpio).

• **12.2 Persistence and degradability:**

No available data.

• **12.3 Bio-accumulative potential:**

No available data.

• **12.4 Mobility in soil:**

No available data.

• **12.5 Results of PBT and vPvB assessment**

According to the results of its assessment, this substance is not a PBT or a vPvB.

• **12.6 Endocrine disrupting properties:**

This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

• **12.7 Other adverse effects:**

No known other adverse effects.

• **12.8 Additional ecological information**

• **General notes:**

WGK1 (German Regulation) (self-assessment): Low hazardous for water.

Do not allow large quantities of the product to reach ground water, water course or sewage system.

SECTION 13: Disposal consideration

• **13.1 Waste treatment methods**

• **Recommendation:**

Small quantities can be disposed together with household garbage.

Large quantities disposed must be in according to the local regulation.

• **13.2 Un-cleaned packaging**

• **Recommendation:**

Dispose of contents/container in according to the local regulation.

SECTION 14: Transport information

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• ADR/RID (2021 Edition)	<i>This product is not subject to ADR/RID.</i>
• IATA-DGR (63th)	<i>This product is not subject to IATA-DGR.</i>
• IMO/IMDG (40-20)	<i>This product is not subject to IMO/IMDG code.</i>

SECTION 15: Regulatory information

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

• **MAK (German Maximum Workplace Concentration):**

This substance is not listed.

• **Directive 2012/18/EU**

• **Named dangerous substances-ANNEX I:**

This substance is not listed.

• **Seveso category:** *Not applicable*

• **Qualifying quantity (tonnes) for the application of lower-tier requirements:** *Not applicable*

• **Qualifying quantity (tonnes) for the application of upper-tier requirements:** *Not applicable*

• **National regulations.**

• **Water hazard class:**

WGK1 (German Regulation) (self-assessment): Low hazardous for water.

• **Other regulations, limitations and prohibitive regulations**

• **SVHC Candidate list of REACH Regulation Annex XIV Authorization:**

This substance is not listed.

• **REACH Regulation Annex XVII Restriction:**

This substance is not listed.

• **REACH Regulation Annex XIV Authorization List:**

This substance is not listed.

• **15.2 Chemical safety assessment:**

A Chemical Safe Assessment has not been carried out.

SECTION 16: Other information

• **16.1 Indication of changes:**

None.

• **16.2 Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

PBT: Persistent, Bio accumulative and Toxic

SVHC: Substance of Very High Concern

LC50: Lethal concentration, 50 percent

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Eye Irrit. 2: Eye damage/irritation, hazard category 2

• **16.3 Key literature references and sources for data**

<https://echa.europa.eu/>

<https://chem.nlm.nih.gov/>

<https://www.osha.gov/>

<http://www.unece.org/>

<http://www.imo.org/>

<https://www.dguv.de/>

<https://epa.govt.nz/>

<http://www.ilo.org/>

<https://www.phmsa.dot.gov/>

• **16.4 Relevant H- and EUH-phrases (number and full text):**

H319 Causes serious eye irritation

• **16.5 Training advice:**

Workers must be trained in general and specific aspects of safe work procedures for this chemical. Workers need easy to understand guidelines and instructions for safe working with this chemical. Instructions, guidelines and legally required documents need to be available for workers in easy to understand language.

• **16.6 Further information:**

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, its amendment Regulation (EU) No 2020/878 and (EC) No 1272/2008.

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End of safety data sheet