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

· Product identifier

· Trade name: Fisetin

· CAS Number:

528-48-3

EC number:

208-434-4

- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation Laboratory chemical
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

SHANGHAI ZNC BIOTECHNOLOGY CO., LTD.

TEL: +86-21-6845 3907 E-Mail: info@zncbio.com

- · Further information obtainable from: Department Health, Safety and Environment
- · Emergency telephone number: +86-177 1763 3275

2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008 Void
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Void
- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Other hazards All chemicals are potentially dangerous. They should only be handled by specially trained personnel.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Substances

· CAS No. Description

528-48-3 3,3',4',7-Tetrahydroxyflavone

- · Identification number(s)
- · EC number: 208-434-4

4 First aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; if there is any trouble seek medical help.
- · After skin contact:

Immediately rinse with water.

If there is any trouble seek medical help.

- · After eye contact: To b e sure rinse opened eye under running water. If there is any trouble seek medical help.
- · After swallowing:

Rinse out mouth and drink a glass of water. Do not induce vomiting.

If there is any trouble seek medical help.

(Contd. on page 2)

Trade name: Fisetin

(Contd. of page 1)

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO)

- · Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Avoid formation of dust.
- · Environmental precautions: Do not allow to enter sewers/ground water or penetrate the soil.
- \cdot Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose of the material collected according to regulations.

· 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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling Handling corresponding to laboratory safety guidelines.
- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: None.
- · Recommended storage temperature: +4 °C
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Avoid contact with the eyes and skin.

(Contd. on page 3)

Trade name: Fisetin

(Contd. of page 2)

Do not breathe dust.

- · Respiratory protection: Required when dusts are generated.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Solid
Colour: Whitish
Odourless

Change in condition

Melting point/Melting range: 330°C

Boiling point/Boiling range: Undetermined. • **Flash point:** Not applicable.

· Flammability (solid, gaseous): Product is not flammable.

• **Danger of explosion:** Product does not present an explosion hazard.

· **Density:** Not determined.

· Solubility in / Miscibility with

water: Partly soluble.

• Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: Heating
- · Possibility of hazardous reactions No information available.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: Strong oxidizing agents.
- \cdot Hazardous decomposition products: Carbon monoxide and carbon dioxide

(Contd. on page 4)

Trade name: Fisetin

(Contd. of page 3)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values relevant for classification: Quantitative data on the toxicity of this product are not available.
- · Primary irritant effect:
- · on the skin: No information available.
- · on the eve: No information available.
- · after inhalation: No information available.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

We have no description of any toxic symptoms.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

• Further information: The product should be handled with the care usual when dealing with chemicals.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: Quantitative data on the ecological effect of this product are not available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Do not allow to enter waters, waste water, or soil!
- · Additional ecological information:
- · General notes: Generally not hazardous for water
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

- · Uncleaned packaging:
- · Recommendation: Disposal according to official regulations.

14 Transport information

· UN-Number

· ADR, ADN, IMDG, IATA Void

· UN proper shipping name

· ADR, ADN, IMDG, IATA Void

· Transport hazard class(es)

· ADR, ADN, IMDG, IATA

· Class Void

· Packing group

· ADR, IMDG, IATA Void

(Contd. on page 5)

Trade name: Fisetin

(Contd. of page 4)

· Environmental hazards:

· Special precautions for user Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

 \cdot ADR

• **Remarks:** Not subject to transport regulations.

· UN "Model Regulation":

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations:
- · Waterhazard class: Generally not hazardous for water (German regulation).
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: Department: Health, Safety and Environment

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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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

* Data compared to the previous version altered.

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