



MATERIAL SAFETY DATA SHEET

(M S D S)



Version 7.0 (2021-9-1)

Updated version 6.0 (2017-1-1)

1. CHEMICAL INFORMATION AND MANUFACTURER IDENTIFICATION

1.1 Chemical information

<i>Chemical name</i>	Food Additive Amaranth
<i>Chemical use</i>	Food color, which can be used in food, drugs, Cosmetics, etc.

1.2 Manufacturer information

<i>Head office name</i>	Shanghai Dyestuffs Research Institute Co., Ltd
<i>Head office address</i>	No.1238 ZhongShan Rd. (N), Shanghai, China
<i>Factory name</i>	Shanghai Dyestuffs Research Institute Co., Ltd Nantong Branch
<i>Factory address</i>	No.28, Tongda Road, NETDA, Nantong City, Jiangsu, China
<i>Zip code</i>	200065
<i>Telephone number</i>	008621-56086210; 008621-56093493
<i>Fax</i>	008621-56083326
<i>E-mail</i>	market@shi-tou.com

1.3 Emergency phone 008621-56093493

2. RISK CODES

2.1 Regulations of the People's Republic of China

According to the «Catalogue of Hazardous Chemicals(Ver.2018)», This product does not belong to dangerous goods.

2.2 GHS Hazard category Non hazardous substances or mixtures.

2.3 GHS Label elements Non hazardous substances or mixtures.

2.4 Physical and chemical hazards No data available .

2.5 Health hazards No data available .

2.6 Environmental hazards No data available .

2.7 Other hazards No data available .

2.8 Emergency overview

<i>Main symptoms</i>	May cause skin allergic reactions. Inhalation may cause allergies, asthma symptoms, or breathing difficulties.
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Emergency measure

If in contact with skin, rinse the contact area with soap and water.

If accidental inhalation causes difficulty breathing, transfer the victim to fresh air and maintain a comfortable resting position for breathing.

If the symptoms are severe, seek medical attention promptly.

3. COMPONENT/INFORMATION ON INGREDIENTS**3.1 Component**

It's an organic compound.

3.2 Specific information**Compound name**

3-Hydroxy-4-(4-azonaphthalene sulfonic acid)
2,7-naphthalene disulfonate trisodium salt

Synonyms

Amaranth

Formula

$C_{20}H_{11}N_2Na_3O_{10}S_3$

Formula weight

604.48

CAS-No.

915-67-3

EINEC-No.

213-022-2

Color Index

C.I.16185

C.I.FOOD RED 9

4. FIRST AID MEASURES**4.1 Necessary first aid measures****Inhalation**

Move the victim to fresh air, maintain clear breathing, and rest. If you feel unwell, please seek medical attention.

Skin contact

Immediately remove/remove all contaminated clothing. Wash skin/shower with water. If skin irritation or rash occurs: seek medical attention.

Eye contact

Immediately lift the eyelids and rinse with plenty of flowing water for at least 15 minutes; If there is still a stimulating reaction, seek medical attention.

Ingestion

When consuming a large amount, induce vomiting and rinse the mouth. Seek medical attention if necessary.

4.2 Acute/delayed effects

Refer to Part 11 for detailed information.

4.3 Main symptoms/health impact

Refer to Part 11 for detailed information.

5. FIREFIGHTING MEASURES**5.1 Fire extinguishing methods
/extinguishing agents**

In case of fire, use water spray, foam, dry powder, carbon dioxide and other fire fighting equipment and methods.

5.2 Special hazards	No specific fire or explosion hazards.
5.3 Special firefighting methods /Protective equipment for firefighters	Firefighters should wear appropriate protective equipment and matching self-contained breathing equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1 Protective measures, equipment, and emergency response procedures for operators	Operators use personal protective equipment such as goggles, gloves, and self-contained breathing apparatus. Prevent unrelated and unprotected personnel from entering the scene. Prevent the generation of dust and avoid inhalation. Maintain a well ventilated environment. The leaked product poses a risk of slipping. Evacuate personnel to a safe area.
6.2 Environmental protection measures	Prevent product diffusion and contact with soil, water sources, ditches, and drainage pipelines to avoid environmental pollution. If environmental pollution occurs, relevant departments should be notified in a timely manner.
6.3 Methods for containment and elimination of leaked materials	Sprinkle water to keep the site moist and prevent the generation of dust. Sweep or shovel it into a marked closed container and dispose of it through an approved waste disposal department.
6.4 Prevent secondary hazards from occurring	Store according to safe storage conditions and follow good industrial and safety operating practices.

7. HANDLING AND STORAGE

7.1 Precautions for operation	
<i>Occupational health</i>	Avoid swallowing or inhaling; Good industrial hygiene habits and local regulations should be followed during operation.
<i>Operation requirements</i>	Prevent the generation of dust and provide suitable exhaust equipment in areas where dust may be generated.
7.2 Storage	
<i>Storage conditions</i>	Store in a ventilated and dry warehouse.
<i>Fire prevention measures</i>	Equip necessary fire-fighting facilities.
<i>Isolation measures</i>	No special measures need to be taken.
<i>Packing material</i>	No special measures need to be taken.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Engineering control methods	Install appropriate air ventilation equipment on the site to control dust concentration.
8.2 Personal protective equipment	
<i>Respiratory system protection</i>	Wear a dust mask that complies with local regulations and standards.
<i>Hand protection</i>	Wear work gloves that comply with local regulations and standards.
<i>Eye protection</i>	Wear protective eyes that comply with local

Skin and body protection

regulations and standard.

Wear work protective clothing that complies with local regulations and standards.

9. PHYSICOCHEMICAL PROPERTIES**9.1 General information****Appearance**

Powder or particle.

Color

Reddish brown to dark reddish brown.

Odour

None.

9.2 Health, safety, and environmental information**pH**

7.5—8.9 10 g/L

Melting/freezing point

No data available .

Initial boiling point and boiling range

No data available .

Flash point

No data available .

Explosion limit

No data available .

Vapour pressure/density

No data available .

Density0.5 g/cm³**Water solubility**

50—100 g/L 25 °C

9.3 Other information**Partition coefficient :
N-octanol/water**

No data available .

Auto-ignition temperature

No data available .

Decomposition temperature

No data available .

Oxidability

None.

10. STABILITY AND REACTIVITY**10.1 Stability**

Stable under normal storage conditions and clumping in humid environments.

10.2 Hazardous reactions

No data available .

10.3 Conditions to avoid

High temperature and humid environment.

10.4 Forbidden substances

Strong reducing agent, strong oxidizing agent, acid, alkali, etc.

10.5 Dangerous decomposition products

Carbon oxides, nitrogen oxides, sulfur oxides, etc.

11. TOXICOLOGICAL INFORMATION**11.1 Acute toxicity**

LD50 Oral-Mouse-10000 mg/kg

11.2 Skin irritation or corrosion

Non irritants (rabbit)

11.3 Eye irritation or corrosion

Non irritants (rabbit)

11.4 Respiratory or skin sensitization

May cause respiratory or skin allergic reactions.

11.5 Germ cell mutagenicity

No data available .

11.6 Carcinogenicity

No data available .

11.7 Reproductive toxicity

No data available .

11.8 Specific target organ systemic No data available .

toxicity-single exposure

11.9 Specific target organ systemic No data available .

toxicity-repeated exposure

11.10 Inhalation hazards May cause respiratory allergies or irritation.

12. ECOLOGICAL INFORMATION

12.1 Environmental Impact/

Ecotoxicity

Persistence/Degradation No data available .

Potential bioaccumulation No data available .

(BCF)

Mobility in soil No data available .

For water fleas and other No data available .

aquatic invertebrates

toxicity of vertebrates

12.2 Other ecological information

As $\leq 1.0 \text{ mg/kg}$

Pb $\leq 10.0 \text{ mg/kg}$

13. WASTE DISPOSAL

13.1 Residual waste Hand over waste to qualified waste disposal departments for disposal and comply with local waste disposal regulations.

13.2 Contaminated containers and packaging Hand over contaminated containers and packaging to qualified waste disposal departments for disposal and comply with local waste disposal regulations.

14. TRANSPORT INFORMATION

14.1 UN number

European Land Transport Safety Regulations No data available .

International Maritime Safety Regulations No data available .

ICAO TI No data available .

14.2 UN Transport Name

European Land Transport Safety Regulations Non dangerous goods.

International Maritime Safety Regulations Non dangerous goods.

ICAO TI Non dangerous goods.

14.3 UN Transport Hazard Categories

European Land Transport Safety Regulations No data available .

International Maritime Safety Regulations No data available .

ICAO TI No data available .

14.4 Packaging Group

European Land Transport Safety Regulations No data available .

International Maritime Safety Regulations No data available .

ICAO TI No data available .

14.5 Marine pollutants None.

14.6 Transportation precautions During transportation, it must be rainproof, moisture-proof, and sun proof, and must not be mixed with toxic, harmful or other substances.

15. REGULATORY INFORMATION

This product complies with the national standards of the People's Republic of China GB 4479.1-2010.

Users should make sure that this product is fully suitable for their intended use before use, and use it in accordance with the relevant national regulations.

This product is not listed in the Hazardous Chemicals Catalogue (2018 Edition).

The transportation, storage, use, and disposal of this product should comply with local regulatory requirements.

16. OTHER INFORMATION

When using this substance, strict adherence to local regulations is required.

The above information is considered correct, but does not include all information and is only used as a guide. The information in this document is based on the company's current knowledge and experience, and is applicable to this product in terms of correct safety instructions. This information does not represent a guarantee of the nature and performance of this product.

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