

MATERIAL SAFETY DATA SHEET

Section 1 Description

Product Name	Phloretin
Manufacturer/Supplier	Plamed Green Science Group
Address	69# Jinye Rd., High-Tech Zone, Xi'an, P. R. China.
Phone Number	+ 86-29-88215350

Section 2 Ingredients/Identity Information

Components	Common names and synonyms	CAS-No.	Concentration
Phloretin	3-(4-hydroxyphenyl)-1-(2,4,6-trihydroxyphenyl)	60-82-2	100%

Section 3 Possible Hazards

• Classification of the substance or mixture:

Not classified.

GHS label elements, including precautionary statements

Pictogram(s): No symbol

Signal word: No signal word

Hazard statement(s): none

Precautionary statement(s)- Prevention: none

Response: none

Storage: none.

Disposal: none.

• Other hazards which do not result in classification: none.

Section 4 First Aid Measures

Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled



If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse with plenty of water (remove contact lenses if easily possible).

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- Most important symptoms/effects, acute and delayed: no data available
- Indication of immediate medical attention and special treatment needed, if necessary: no data available

Section 5 Fire-fighting Measures

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- Specific hazards arising from the chemical: no data available
- Special protective actions for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal

Section 7 Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Section 8 Control Methods

Control parameters

Occupational Exposure limit values: no data available

Biological limit values: no data available

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The



selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection: Wear dust mask when handling large quantities.

Thermal hazards: no data available

Section 9 Physical and Chemical Properties (Typical)

Physical state Crystalline Solid

Color no data available

Odor no data available

Melting point/ freezing point $262 \, \text{C}$ (dec.) (lit.)

Boiling point or initial boiling point 239 °C

and boiling range

Flammability no data available.

Lower and upper explosion limit no data available

flammability limit

Flash point 87 $\mathbb{C}(\text{lit.})$

Auto-ignition temperature no data available

Decomposition temperature no data available

pH no data available

Kinematic viscosity no data available

Solubility no data available

Partition coefficient n-octanol/water no data available

(log value)

Vapor pressure no data available

Density and/or relative density 1.429g/cm3

Relative vapor density no data available



Particle characteristics

no data available

Section 10 Stability and Reactivity

• Reactivity: no data available

• Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: no data available

• Conditions to avoid: no data available

• Incompatible materials: no data available

Hazardous decomposition products: no data available

Section 11 Toxicological Information

Acute toxicity

Oral: no data available

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: no data available

Reproductive toxicity: no data available

STOT-single exposure: no data available

STOT-repeated exposure: no data available

Aspiration hazard: no data available

Section 12 Ecological Information

Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available



Toxicity to microorganisms: no data available

• Persistence and degradability: no data available.

Bioaccumulative potential: no data available

• Mobility in soil: no data available

• Other adverse effects: no data available

Section 13 Disposal Considerations

Disposal methods

Product: The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging: Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

Section 14 Transport Information

• UN Number:

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

UN Proper Shipping Name:

ADR/RID: unknown

IMDG: unknown

IATA: unknown

Transport hazard class(es):

ADR/RID: No dangerous goods

IMDG: No dangerous goods

IATA: No dangerous goods

• Packing group, if applicable:

ADR/RID: No dangerous goods

IMDG: No dangerous goods

IATA: No dangerous goods

• Environment hazards:

ADR/RID: no

IMDG: no

IATA: no

- Special precautions for user: no data available
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: no data available

Section 15 Regulatory Information

Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Phloretin	Phloretin	60-82-2	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			
EC Inventory			
United States Toxic Substances Control Act (TSCA) Inventory			
China Catalog of Hazardous chemicals 2015			
New Zealand Inventory of Chemicals (NZIoC)			Not Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Not Listed.



Vietnam National Chemical Inventory	Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Not Listed

Section 16 Other Information

Information on revision

Creation Date Aug 12, 2017

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Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

References

IPCS - The International Chemical Safety Cards (ICSC), website:

http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple



ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website:

http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website:

http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

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