西安绿天生物技术有限公司
Plamed Green Science Group

MATERIAL SAFETY DATA SHEET

1.Identification Product and Company Information

CAS No: 59870-68-7

Product Name	PMWhite® Glabridin-90
Manufacturer/Supplier	Plamed Green Science Group
Address	69# Jinye Rd., High-Tech Zone, Xi'an, P. R. China.
Phone Number	+ 86-29-88215350

2.Hazard identification

2.1 Classification of the substance or mixture: Not classified.

2.2 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

2.3 Other hazards which do not result in classification: none

3.Composition/information on ingredients

Substances	CAS number	Chemical name	EC number	Concentration
Glabridin	59870-68-7	Glabridin	none	100%

4.First-aid measures

4.1Description 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 thoroughly with plenty of water for at least 15 minutes and consult a physician.

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

4.2 Most important symptoms/effects, acute and delayed: no data available

4.3 Indication of immediate medical attention and special treatment needed, if necessary: no data available

5.Fire-fighting measures：

5.1 Extinguishing media

Suitable extinguishing media

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

5.2 Specific hazards arising from the chemical: no data available

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6.Accidental release measures：

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 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.

6.3 Methods and materials for containment and cleaning up

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

7.Handling and storage：

7.1 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.

7.2 Conditions for safe storage, including any incompatibilities

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

8.Exposure controls/personal protection：

8.1 Control parameters

Occupational Exposure limit values no data available Biological limit values: no data available

8.2 Appropriate engineering controls

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

8.3 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

9.Physical and chemical properties

Physical state: light yellow powder ,insoluble in water

Color: no data available

Odor: no data available

Melting point/ freezing point: 154-155ºC

Boiling point or initial boiling point and boiling range: 518.6ºC at 760 mmHg

Flammability: no data available

Lower and upper explosion limit / flammability limit: no data available

Flash point: 267.4ºC

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 (log value): no data available

Vapour pressure: no data available

Density and/or relative density: no data available

Relative vapour density: 1.257 g/cm3

Particle characteristics: no data available

10.Stability and reactivity：

10.1 Reactivity no data available

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions no data available.

10.4 Conditions to avoid no data available.

10.5 Incompatible materials no data available.

10.6 Hazardous decomposition products no data available.

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.

12.Ecological information:

12.1 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

12.2 Persistence and degradability no data available

12.3 Bioaccumulative potential no data available

12.4 Mobility in soil no data available

12.5 Other adverse effects no data available

13.Disposal considerations

13.1 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.

14.Transport information

14.1 UN Number

ADR/RID: no data available IMDG: no data available IATA: no data available

14.2 UN Proper Shipping Name

ADR/RID: no data available IMDG: no data available IATA: no data available

14.3 Transport hazard class(es)

ADR/RID: no data available IMDG: no data available IATA: no data available

14.4 Packing group, if applicable

ADR/RID: no data available IMDG: no data available IATA: no data available

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code no data available

15.Regulatory information

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

Chemical name	Common name and synonyms	CAS number	EC number
Glabridin	Glabridin	59870-68-7	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Not Listed.
EC Inventory			Not Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Not Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Not Listed
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Not Listed

16.Other information

Information on revision

Creation Date	Jan 13, 2021
Revision Date	Jan 12, 2023

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/gestisstoffdatenbank/index-2.jsp

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

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.