

Product information

Product name Botanical name Goldenseal Extract
Hydrastis canadensis

Batch no.
Best before date

Batch information

4530102 January 2027

Plant part

Root

Country of origin P.R.CHINA

Analysis item	Specification	Result	Analysis test method		
Assay	5% Alkaloids	5.40%	HPLC		
Organoleptic properties					
Appearance ¹	Fine Yellow powder	Conform to specification	Visual		
Γaste	Typical to botanical Conform to specification		Gustatory		
Odor	Typical to botanical	Conform to specification	Olfactory		
Physical properties					
Sieve analysis	80	Conform to specification	Mesh screen or equivalent		
Moisture content	≤5%	4.60%	IR balance or equivalent		
Ash	≤5%	3.80%	2g/525°C/5hrs or equivalent		
Heavy metals ²					
Arsenic (As)	≤ 1 ppm	Conform to specification	AA or equivalent		
Cadmium (Cd)	≤ 1 ppm	Conform to specification	AA or equivalent		
Lead (Pb)	≤ 3 ppm	Conform to specification	AA or equivalent		
Mercury (Hg)	≤ 0.1 ppm	Conform to specification	AA or equivalent		
Total heavy metals	≤ 10 ppm	Conform to specification	Colorimetry or equivalent		
Microbiology					
Total plate count	$\leq 10000 cfu/g$	Conform to specification	AOAC or equivalent		
Yeasts & Molds	≤1000cfu/g	Conform to specification	AOAC or equivalent		
Salmonella	Absent/10g	Conform to specification	AOAC or equivalent		
E.Coli	Absent/1g	Conform to specification	AOAC or equivalent		
dentification	Positive	Conform to specification	TLC		
Additional information					

Sterilization method High Temperature & High Pressure Short time (5" - 10")

Re-test date 24 months from production date in original packaging and qualified storage conditions.

Storage Store product in tightly sealed containers in dry and dark environment at room temperature. Avoid exposure to air pollution, heat, sunshine and moisture. Reclose containers tightly after use.

Approved by QA Department Changsha Organic Herb Inc.

I This is a natural product; color variations may appear between extraction batches due to crop, harvest and seasonal fluctuations.

2 Individual and total heavy metals are not being tested for each batch. Random analyses are being regularly performed minimum once a year.

This datasheet is in compliance with USA and EU food regulations.

Before using, read, understand and comply with the information and precautions in the technical data sheets, material safety data sheets, corporate label and other product literature. The information presented herein, while not guaranteed, was prepared and tested by technical personnel and, to the best of our knowledge and belief, is true and accurate as of the date hereof. No warranty, representation or guarantee, express or implied, can be made regarding accuracy, performance, stability, reliability or use. This information is not intended to be all-inclusive, because the manner and conditions of use, handling, storage and other factors may involve other or additional safety or performance considerations. The user is responsible for determining the suitability of any material for a specific purpose and for adopting such safety precautions as may be required. Refer to material safety databasets for specific and handling instructions. Product might be an irritant. No suggestion for use is intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patent, trademark or copyright or to violate any federal, state or local law or regulation.



Allergen Statement

PRODUCT NAME: Goldenseal Extract

We certify that the above-mentioned products does not contain any of the major food allergens listed hereafter.

(1)Major food allergens as listed by regulation(EU)No.1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, Annex Il, and its subsequent amendments.

Major food allergens				
Cereals containing gluten,namely:wheat, rye, barley, spelled, oats, kamut or their hybrids				
Crustaceans or its derivatives	NO			
Eggs and products thereof	NO			
Fish and products thereof	NO			
Except: fish gelation used as carrier for vitamin or carotenoid preparations.				
Peanuts and products thereof	NO			
Soy or its derivatives	NO			
Milk or its derivatives (including lactose)	NO			
Tree Nuts or its derivatives:	NO			
Almonds, hazelnuts, walnuts, cashews, pecans, Brazil nuts, pistachios, macadamias or Queensland nuts, and				
products thereof.				
Celery and products thereof	NO			



Mustard and products thereof	NO	
Sesame seeds and products thereof	NO	
Sulphur dioxide and sulphites at concertrations of more than 10mg/kg or 10mg/litre		
expressed as SO2		
Lupins and products thereof	NO	
Mollusks and products thereof	NO	

Date: July24th,2023



CMR Statement

PRODUCT NAME: Goldenseal Extract

We hereby certify that the above product does not contain any CMR substances (Carcinogenic, mutagens, reproductive toxins) according 7th amendment of Annex I of European Council Directive 67/548/CEE relating to the classification of dangerous substances.

March. 31^h, 2021.



CONFIRMATION OF Non GMO STATUS

PRODUCT NAME: Goldenseal Extract

This is to certify that the above-mentioned product is not manufactured from GM raw materials and are therefore not subject to labelling under regulations 1829/2003/EC and 1830/2003/EC. and European Directive 2001/18 and related amendments.

. June7th,2021

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name: Goldenseal Extract Company Name: Madar Corporation Limited

Emergency Contact: 01425 655 555 Tel: + 44 (0)1425 655 555

E-mail:

Technical@madarcorporation.co.uk

2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	Percentage	Cas Number	OSHA PEL	ACGIH TLV	Other Limits
Goldenseal Extract	100%Goldenseal Extract	/	No data.	No data.	No data.

3. Hazards Identification

Emergency Overview: No data available.

Route(s) of Entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection

Potential Health Effects (Acute and Chronic): Material may be irritating to the mucous membranes and upper respiratory tract. May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. The toxicological properties of this compound have not been fully evaluated.

Signs and Symptoms Of Exposure: No data available.

4. First Aid Measures

Emergency and First Aid Procedures: If inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention. If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel. In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 20 minutes. Have eyes examined and tested by medical personnel. In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

5. Fire Fighting Measures

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus ressure-demand (MSHA/NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

Flammable Properties and Hazards: Emits toxic fumes under fire conditions.

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Unsuitable Extinguishing Media: No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Wear a NIOSH/MSHA approved self-contained breathing apparatus

Released Or Spilled: and appropriate personal Wear a NIOSH/MSHA approved self-contained breathing apparatus and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves). Vacuum or sweep up material and place in disposal container. Avoid raising dust. After removal, ventilate contaminated area and flush thoroughly with water.

7. Handling and Storage

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.

Precautions To Be Taken in Handling:

Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing.

Avoid prolonged or repeated exposure. Do not reuse this container.

Use with adequate ventilation. Wash thoroughly after handling.

Precautions To Be Taken in Storing: Keep tightly closed. Store at correct temperature.

8. Exposure Controls/Personal Protection

Protective Equipment Summary – Hazard Eye wash station in work area Lab coat Latex disposable gloves

Label Information: Safety glasses Safety shower in work area Vent Hood **Respiratory Equipment (Specify Type):** No data available.

Eye Protection: Safety glasses Protective Gloves: Latex disposable gloves

Other Protective Clothing: Lab coat

Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Work/Hygienic/Maintenance Practices: Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling.

9. Physical and Chemical Properties

Physical States: Powder 19-20 Sandleheath In Letting Estates: Foodlagbridge, Hampshire, SP6 1PA, UK

Boiling Point: No data. Autoignition Pt: No data.

Flash Pt: No data. Method: Explosive Limits: LEL: No data. UEL: No data.

Specific Gravity (Water = 1): No data.

Vapor Pressure (vs. Air or mm Hg): No data.

Evaporation Rate (vs Butyl Acetate=1): No data.

Solubility in Water: No data

Corrosion Rate: No data.

Molecular Weight: No data.

Percent Volatile: N.A.

Formula: No data.

pH: No data.

Color: Yellow Appearance and Odor: Fine powder

10. Stability and Reactivity

Stability: Unstable [] Stable [X] Conditions To Avoid - Instability: protect from moisture

Incompatibility - Materials To Avoid: strong oxidizing agents Hazardous Decomposition Or Byproducts: carbon dioxide carbon

monoxide

Hazardous Polymerization: Will occur [] Will not occur [X] Conditions To Avoid – Hazardous No data available. Polymerization:

11. Toxicological Information

Toxicological Information: The toxicological effects of this compound have not been thoroughly studied

Carcinogenicity/Other Information: No data available.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

Ecological Information: Run off from fire control or dilution water may cause pollution.

13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with local, state and federal regulations.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name: No data available.

Additional Transport Information: Transport in accordance with local, state, and federal regulations.

15. Regulatory Information

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS#	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
Goldenseal Extract	/	No	No	No	No

US EPA CAA,CWA,TSCA

Hazardous Components (Chemical Name)	CAS#	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP65
Goldenseal Extract	/	No	No	No	No

SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

Reauthorization Act of 1986) Lists :

Sec.302 EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ indicates 10000 LB TPQ if not volatile.

Sec.304 EPA SARA Title III Section 304:Cercla Reportable + Sec.302 with Reportable Quantity. Indicates statutory RQ.

Sec.313: EPA SARA Title III Section 313 Toxic Release Inventory. Note:-Cat indicates a member of a chemical category.

Sec.110: EPA SARA 110 Superfund Site Priority Contaminant List

TSCA (Toxic Substances Control

Act) Lists:

5A(2): Chemical Subject to Significant New Rules (SNURS)

6A: Commercial Chemical Control Rules

8A: Toxic Substances Subject To Information Rules on Production
8A CAIR: Comprehensive Assessment Information Rules - (CAIR)
8A PAIR: Preliminary Assessment Information Rules - (PAIR)
8C: Records of Allegations of Significant Adverse Reactions

8D TERM: Health and Safety Data Reporting Rule Terminations

8D: Health and Safety Data Reporting Rules

Other Important Lists:

CWA NPDES: EPA Clean Water Act NPDES Permit Chemical CAA HAP: EPA Clean Air Act Hazardous Air Pollutant

CAA ODC: EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC) CA PROP 65: California Proposition 65

16. Other Information

Additional Information About This Product: References: Not available.

Other Special Considerations: Not available.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall ScienceLab.com be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if ScienceLab.com has been advised of the possibility of such damages



Product

Name Goldenseal Extract

Botanical name Hydrastis canadensis

Plant part Root
Country of origin P.R.CHINA

Physical and Chemical Properties Microbiology

Appearance 1 Yellow, FINE POWDER Visual Total plate count ≤10000cfu/g AOAC Taste Typical to botanical Gustatory Yeasts & Molds ≤1000cfu/g AOAC Odor Typical to botanical Olfactory Salmonella Absent/10g AOAC E Coli Sieve analysis 80 Mesh screen Absent/1g AOAC

Moisture ≤5% IR balance Sterilization method High Temperature & High Pressure

Ash $\leq 5\%$ Short time (5" - 10")

Packaging | Storage3 Heavy metals²

AA or equivalent Carton drum | inner double layer plastic bag ≤ 1 ppm Packaging Arsenic (As) Cadmium (Cd) ≤ 1 ppm AA or equivalent Storage Cool, dry, dark, airtight environment. Lead (Pb) ≤ 3 ppm Storage of products at room temperature Mercury (Hg) ≤ 0.1 ppm Keep away from sunshine and moisture

Reclose packaging tightly after use Total heavy metals ≤ 10 ppm

Re-test date 24 months after manufacture date in original packaging and advised storage condition

Identification Positive TLC

Additional product information Composition

Assay 5% Alkaloids HPLC

Goldenseal Patract

This datasheet is in compliance with USA and EU food regulations

Analysis methods indicated in this product datasheet are generally used methods. Equivalent methods can be applied to determine the product specifications

Disclaimer1 and, to the best of our knowledge and belief, is true and accurate

¹ This is a natural product; color variations may appear between extraction batches due to crop, harvest and seasonal fluctuations

² Individual and total heavy metals are not being tested for each batch. Random analyses are being regularly performed minimum once a year

³ Packaging, storage and Re-test date can differ upon customer or quantity requirements or special product features

⁴ KOSHER and HALAL certifications are being regularly updated and issued by authorized institutions with new and revised extracts. It might be that this extract has not yet been included in the current version of KOSHER and HALAL certificates



CONFIRMATION OF Vegan STATUS

PRODUCT NAME: Goldenseal Extract

This is to certify that the above-mentioned product does not contain any animal products, and it is qualified as a vegan food and it is processing methods do not include the use of bone char or raw materials containing any animal products and comply with the Food certification.

June7th,2021



Process Flow Chart of Goldenseal Extract

