

TECHNICAL SCIENTIFIC REPORT

RHODIOLA DRY EXTRACT

(*Sedum roseum* (L.) Scop / *Rhodiola rosea* L.)

BOTANICAL DESCRIPTION:

Dried cut root and rhizome of *Sedum roseum* (L.) Scop. (synonym: *Rhodiola rosea* L.)

Accurate selection and identification of Rhodiola root and rhizome according to bibliography and monograph of United States Pharmacopoeia "*Rhodiola rosea*".



EXTRACT INFORMATION:

RHODIOLA DRY EXTRACT is obtained from roots and rhizomes of *Rhodiola rosea* L. by aqueous and hydroalcoholic extraction.

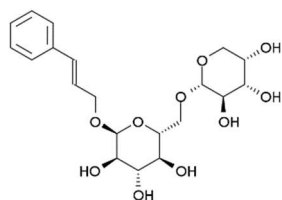
RHODIOLA DRY EXTRACT is available from Organic crops.

INCI Name: SEDUM ROSEA ROOT EXTRACT

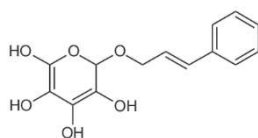
CAS: 92457-37-9

EINECS: 296-320-5

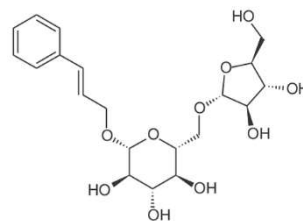
ANALYTICAL MARKERS: Phenylpropanoid glycosides (rosavin, rosin, rosarin) and salidroside.



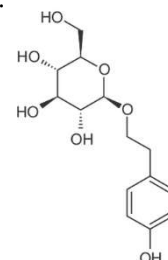
Rosavin



Rosin



Rosarin



Salidroside

Select Botanicals Extracts comply with the requirements of any relevant monograph in the European Pharmacopoeia and/or European Directives applicable to the end use of the extract.

Select Botanical, S.L. manufactures Highest Quality Extracts following strictest Quality Management System in compliance with the "Good Manufacturing Practices" (GMP) requirements, carrying on the last manufacturing steps in classified areas (Clean Rooms).

PHYTOTHERAPY INDICATIONS:

- Indicated to increase work capacity, resilience, and improve recovery time. ^(2,4)
- Traditional use for temporary relief of symptoms of stress, such as fatigue and sensation of weakness. ⁽³⁾
- Indicated for treatment of mild to moderate depression and/or anxiety. ⁽²⁾
- Formulated in cosmetic products as antioxidant, astringent, and skin conditioning. ⁽⁶⁾

ORAL USE

- Antifatigue ^(2,3)
- Stress-protective effects ^(2,3)
- Adaptogen ⁽²⁾
- Antioxidant ⁽²⁾

TOPICAL USE

- Antioxidant ⁽⁶⁾
- Astringent ⁽⁶⁾
- Skin conditioning ⁽⁶⁾

ACTIVITIES AND PHARMACOLOGICAL STUDIES:

- **Improves physical and mental performance in fatigue situations as well as working capability:** Improved recovery time, strength, endurance, cardiovascular measures, and coordination. ^(2,3,4,5)
- **Effect on depression and anxiety:** improves depression symptoms according to Hamilton scale for depression and anxiety (HAMD and HAMA). ^(3,7)
- **Improves visual perception, short-term memory, and attention:** Clinical assays had proved a positive dose dependent effect regarding exhaustion, low motivation, somnolence, low libido, sleep disorders, and cognitive deficiencies. ^(2,4,5)

DOSAGE AND ADMINISTRATION:

Dosage and administration:

Oral Use:

Recommended dosage and administration for traditional use are indicated in the Community herbal monograph on *Rhodiola rosea* L. rhizoma et radix. **EMA/HMPC/ 232091/2011.** ⁽³⁾

Topical Use:

Rhodiola extracts may be found formulated in creams, lotions, face serums, and after sun, among others as antioxidant, astringent, and skin conditioning. ⁽⁶⁾

Undesirable effects:

There are no reported toxic effects or intolerance phenomenon to normal use doses. ⁽³⁾

Precautions/Contraindications:

Hypersensitivity to the active substance. ⁽³⁾

Safety during pregnancy and lactation has not been established. Therefore, is not recommended. ⁽³⁾

The safety in children and adolescents under 18 years of age has not been established. So, it is not recommended. ⁽³⁾

BIBLIOGRAPHY AND OTHER REFERENCE SOURCES:

1. *Rhodiola rosea* monographs of USP 41
2. Assessment report on *Rhodiola rosea* L., rhizoma et radix. EMA/HMPC/232100/2011.
3. Community herbal monograph on *Rhodiola rosea* L., rhizoma et radix. EMA/HMPC/232091/2011.
4. *Rhodiola rosea*: A phytomedical Overview. Richard P. Brown, Patricia L. Gerbag, Zakir Ramazanov. Herbalgram 2002; 56:40-52 American Botanical Council.
5. *Rhodiola rosea*: a versatile adaptogen. Farhath Khanum, marinder Singh Bawa and Brahm Singh. Institute of food technologists. Comprehensive reviews in food science and food safety, Vol 4, 2005, 55-62.
6. Cosmetic Ingredient Database [European Commission Regulation (v.2)]