NATURAL HEALTH PRODUCT

ECHINACEA ANGUSTIFOLIA

This monograph is intended to serve as a guide to industry for the preparation of Product Licence Applications (PLAs) and labels for natural health product market authorization. It is not intended to be a comprehensive review of the medicinal ingredient.

**Notes**

- Text in parentheses is additional optional information which can be included on the PLA and product label at the applicant’s discretion.
- The solidus (/) indicates that the terms and/or the statements are synonymous. Either term or statement may be selected by the applicant.

**Date:** July 18, 2017

**Proper name(s):**

*Echinacea angustifolia* DC. (Asteraceae) (USDA 2012)

**Common name(s):**


**Source material(s):**

Root and rhizome (Barnes et al. 2007; Grieve 1971 [1931])

**Route(s) of administration:**

Oral

**Dosage form(s):**

This monograph is not intended to include foods or food-like dosage forms such as bars, chewing gums or beverages.

Dosage forms by age group:
- **Children 2 years**: The acceptable dosage forms are limited to emulsion/suspension and solution/drops (Giaoia et al. 2008; EMEA/CHMP 2006).
- **Children 3-5 years**: The acceptable dosage forms are limited to chewables, emulsion/suspension, powders and solution/drops (Giaoia et al. 2008; EMEA/CHMP 2006).
- **Children 6-12 years, Adolescents 13-17 years, and Adults ≥ 18 years**: The acceptable dosage forms include, but are not limited to capsules, chewables (e.g., gummies, tablets), liquids, powders, strips or tablets.

**Use(s) or Purpose(s):**

- Traditionally used in Herbal Medicine to help relieve the symptoms of upper respiratory tract infections (Barnes et al. 2007; Blumenthal et al. 2000; Ellingwood 1983 [1919]; Felter and Lloyd 1983 [1898]; Grieve 1971 [1931]).
- Traditionally used in Herbal Medicine to help relieve sore throat (Blumenthal et al. 2000; Moerman 1998).

**Note**

A claim for traditional use must include the term “Herbal Medicine”.

**Dose(s):**

**Table 1** Dose information expressed as “quantity dried equivalent” of *Echinacea angustifolia* root and rhizome presented as dose per day

<table>
<thead>
<tr>
<th>Subpopulation</th>
<th>Quantity dried equivalent (g/day)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children¹</td>
<td>2-4 y</td>
<td>0.17</td>
<td>0.5</td>
</tr>
<tr>
<td>Children and adolescents¹</td>
<td>5-9 y</td>
<td>0.25</td>
<td>0.8</td>
</tr>
<tr>
<td>Adolescents¹</td>
<td>10-14 y</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Adolescents and adults ¹,²,³</td>
<td>≥ 15 y</td>
<td>1.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

¹ Children and adolescent doses were calculated as a proportion of the adult dose (JC 2012). The use of *Échinacea angustifolia* in children is supported by the following references: McIntyre 2005; Bove 2001; Schilcher 1997.

² Adult dose supported by the following references: Barnes et al. 2007; Blumenthal et al. 2000; Bradley 1992

³ Includes pregnant and breastfeeding women

**Note**

Refer to Appendix 1 for examples of dosage preparations and directions for use, according to cited references. The purpose of Appendix 1 is to provide guidance to industry.

**Duration of use:**

For use beyond 8 weeks, consult a health care practitioner (Brinker 2001).
Risk information:

Caution(s) and warning(s)

- If symptoms persist or worsen, consult a health care practitioner.
- If you have a progressive systemic disease such as tuberculosis, collagenosis, multiple sclerosis, AIDS and/or HIV infection, consult a health care practitioner prior to use (Brinker 2010; McGuffin et al. 1997).
- If you have an auto-immune disorder, consult a health care practitioner prior to use (Brinker 2010; McGuffin et al. 1997).
- If you are taking immunosuppressants, consult a health care practitioner prior to use (Brinker 2010; Mills and Bone 2005).

Contraindication(s)

No statement required.

Known adverse reaction(s)

No statement required.

Non-medicinal ingredients:

Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database.

Specifications:

- The finished product specifications must be established in accordance with the requirements described in the Natural and Non-prescription Health Products Directorate (NNHPD) *Quality of Natural Health Products Guide*.
- The medicinal ingredient must comply with the requirements outlined in the NHPID.
- The medicinal ingredient may comply with the specifications outlined in the pharmacopoeial monographs listed in Table 2 below.

Table 2  *Echinacea angustifolia* monographs published in the European (Ph. Eur.) and United States (USP) Pharmacopoeias

<table>
<thead>
<tr>
<th>Pharmacopoeia</th>
<th>Monograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.Eur.</td>
<td>Narrow-leaved Coneflower Root</td>
</tr>
<tr>
<td>USP</td>
<td><em>Echinacea angustifolia</em> Powdered <em>Echinacea angustifolia</em> Extract</td>
</tr>
</tbody>
</table>
References cited:


References reviewed:


Felter HW, Lloyd JU. 1983. King’s American Dispensatory, Volume 1, 18th edition. Sandy (OR): Eclectic Medical Publications; [Reprint of 1898 original].


Appendix 1  Examples of appropriate dosage preparations, frequencies of use and directions for use (for adults only)

**Dried root and rhizome**

- 1-3 g, per day (Barnes et al. 2007)
- 1 g, 3 times per day (Bradley 1992)

**Infusion**

1 g dried root and rhizome, several times per day (not to exceed 3 g per day) (Blumenthal et al. 2000)

Directions for use:
Pour 150 ml of boiling water on dried root and rhizome and steep for at least 10 minutes. Drink between meals (Blumenthal et al. 2000).

**Decoction**

1 g dried root and rhizome, 3 times per day (Bradley 1992)

Directions for use:
Place dried root and rhizome in 150 ml water, bring to a boil, and simmer for 10 minutes (Blumenthal et al. 2000).

**Fluidextract**

0.5-1 g dried equivalent, 3 times per day (1:1, 45% alcohol, 0.5-1 ml) (Bradley 1992)

**Tincture**

0.4-1 g dried equivalent, 3 times per day (1:5, 45% alcohol, 2-5 ml) (Bradley 1992)