Quercetin

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QUERCETIN Help on accessing alternative formats, such as Portable Document Format (PDF), Microsoft Word and PowerPoint (PPT) files, can be obtained in the alternate format help section. (PDF Version - 72 KB) 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 statements are synonymous. Either term or statement may be selected by the applicant. Date June 3, 2019 Proper name(s), Common name(s), Source material(s) Table 1. Proper name(s), Common name(s), Source material(s) Proper name(s) Common name(s) Source ingredient(s) Common name(s) 2-(3,4-Dihydroxyphenyl)-3,5,7-trihydroxy-4H-1-benzopyran-4-one 2-(3,4-dihydroxyphenyl)-3,5,7-trihydroxychromen-4-one 3,3´,4´,5,7-Pentahydroxyflavone Quercetin Quercetin anhydrous Citrus bioflavonoids Quercetin Quercetin dihydrate References: Proper names: Ph.Eur. 2013, ChemID 2012, Merck 2012, PubChem 2012, Martindale 2011; Common names: ChemID 2012; Merck 2012; Source ingredients: NHPID 2019. Route of Administration Oral Dosage Form(s) This monograph excludes foods or food-like dosage forms as indicated in the Compendium of Monographs Guidance Document. Acceptable dosage forms for any age category listed in this monograph for the specified route of administration are listed in the Compendium of Monographs Guidance Document. Use(s) or Purpose(s) Source of/Provides antioxidants (Merck 2012; Martindale 2011; Murray and Bongiorno 2006; Harborne et al. 1999). Used in Herbal Medicine as a capillary/blood vessel protectant (Merck 2012; Martindale 2011; PDR 2008; Murray and Bongiorno 2006; Harborne et al. 1999). Dose(s) Subpopulation(s) Adults 18 years and older Quantity(ies) Antioxidant Not to exceed 1,200 milligrams of Quercetin, per day and 600 milligrams per single dose (NS 2012; Wang et al. 2009; Boots et al. 2008; PDR 2008; Erlund et al. 2003; Lamson and Brignall 2000; Hakkinen et al. 1999). Capillary/ blood vessel protectant 600 - 1,200 milligrams of Quercetin, per day. Not to exceed 600 milligrams per single dose (PDR 2008; Murray and Bongiorno 2006). Direction(s) for use Products providing 40-1,200 milligrams of Quercetin, per day Take with food/meal (Harwood et al. 2007). Duration(s) of Use Products providing 40-1,200 milligrams of Quercetin, per day Consult a health care practitioner/health care provider/health care professional/doctor/physician for use beyond 12 weeks (NS 2012; Harwood et al. 2007; Boyle et al. 2000). Risk Information Caution(s) and warning(s) Products providing 40-1,200 milligrams of Quercetin, per day Consult a health care practitioner/health care provider/health care professional/doctor/physician prior to use if you are pregnant or breastfeeding. 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. Storage conditions Store in a light-resistant container (Ph.Eur. 2013). 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. References Cited Boots AW, Haenen GR, Bast A. Health effects of quercetin: from antioxidant to nutraceutical. European Journal of Pharmacology 2008;582(2-3):325-37. Boyle SP, Dobson VL, Duthie SJ, Hinselwood DC, Kyle JAM, Collins AR. Bioavailability and efficiency of rutin as an antioxidant: a human supplementation study. European Journal of Clinical Nutrition 2000;54(10):774-784. BP 2012: British Pharmacopoeia 2012. Volume I. London (GB): The Stationary Office on behalf of the Medicines and Healthcare products Regulatory Agency (MHRA); 2012. ChemID 2012: ChemIDplus advanced [Internet]. Quercetin: CAS # 117-39-5. Bethesda (MD): United States National Library of Medicine; 2011. [Accessed 2019 May 16]. Available from: http://chem.sis.nlm.nih.gov/chemidplus Duke 1992: Dr. Duke's Phytochemical and Ethnobotanical Databases. Plants containing quercetin, 1992 [Internet]. [Accessed 2019 May 16]. Available from: https://phytochem.nal.usda.gov/phytochem/search/list Duke JA. Handbook of Phytochemical Constituents of GRAS Herbs and Other Economic Plants. Boca Raton (FL): CRC Press; 2001. Egert S, Wolffram S, Schulze B, Langguth P, Hubbermann EM, Schwarz K, Adolphi B, Bosy- Westphal A, Rimbach G, Müller MJ. Enriched

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MEDICINAL INGREDIENT(S)

Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database. Storage conditions Store in a light-resistant container (Ph.Eur. 2013).

DOSAGE FORM(S)

Acceptable dosage forms for any age category listed in this monograph for the specified route of administration are listed in the Compendium of Monographs Guidance Document.

RISK INFORMATION

Caution(s) and warning(s) Products providing 40-1,200 milligrams of Quercetin, per day Consult a health care practitioner/health care provider/health care professional/doctor/physician prior to use if you are pregnant or

breastfeeding. 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. Storage conditions Store in a light-resistant container (Ph.Eur. 2013).

STORAGE CONDITION(S)

Store in a light-resistant container (Ph.Eur. 2013).

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.

REFERENCES

Route of Administration Oral

Proper name(s)	Common name(s)	Source ingredient(s)
Common name(s)		
2-(3,4-Dihydroxyphenyl)-3,5,7-trihydroxy-4H-1-benzopyran-4-one	Quercetin Quercetin dihydrate	Citrus bioflavonoids Quercetin 3,3',4',5,7-Pentahydroxyflavone dihydrate