

European Medicines Agency Post-authorisation Evaluation of Medicines for Human Use

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#### COMMITTEE ON HERBAL MEDICINAL PRODUCTS (HMPC) COMMITTEE FOR MEDICINAL PRODUCTS FOR HUMAN USE (CHMP) COMMITTEE FOR MEDICINAL PRODUCTS FOR VETERINARY USE (CVMP)

#### Draft

#### GUIDELINE ON DECLARATION OF HERBAL SUBSTANCES AND HERBAL PREPARATIONS<sup>1</sup> IN HERBAL MEDICINAL PRODUCTS<sup>2</sup>/TRADITIONAL HERBAL MEDICINAL PRODUCTS

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<sup>&</sup>lt;sup>1</sup> The term "herbal substance" should be considered as equivalent to the term "herbal drug" as defined in the European Pharmacopoeia and the term "herbal preparation" should be considered as equivalent to the term "herbal drug preparation" as defined in the European Pharmacopoeia

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 $<sup>^2</sup>$  Throughout the guideline and unless otherwise specified, the term "herbal medicinal product" includes "traditional herbal medicinal product"

<sup>&</sup>lt;sup>3</sup> SPC: Summary of Product Characteristics.

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KEYWORDS	Herbal medicinal products; traditional herbal medicinal products; herba	.1
	substances; herbal preparations; extracts; declaration; SPC; package leaflet	•••
	labelling; HMPC	

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#### 13 INTRODUCTORY NOTE TO REVISION 1 (2008)

14 The guideline EMEA/HMPC/CHMP/CVMP/287539/2005 was limited to guidance on the declaration in

15 the SPC. It was revised to integrate the declaration in package leaflet and labelling. The revision is in line

- 16 with the "Concept paper on the declaration of herbal substances/herbal preparations in finished herbal
- 17 medicinal products" (EMEA/HMPC/241953/2005).
- 18
- 19 The main chapters that have been revised are the following:
- Executive summary: Declaration in the package leaflet and labelling has been introduced, besides
   declaration in the SPC
- Definitions: Definitions for the terms "declaration" and "strength" have been added
- Annex 1: This new annex has been added to the guideline, providing guidance specifically on declaration in the package leaflet and labelling.
- 25 There are no changes in the guidance on declaration in the SPC (chapter 5 and 6).
- 26
- 27 Comments should be provided using this <u>template</u> to hmpc.secretariat@emea.europa.eu

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#### 60 EXECUTIVE SUMMARY

- 61 The guideline EMEA/HMPC/CHMP/CVMP/287539/2005 was limited to guidance on the declaration in
- 62 the SPC. It was revised to integrate the declaration in package leaflet and labelling. The revision is in line
- 63 with the "Concept paper on the declaration of herbal substances/herbal preparations in finished herbal
- 64 medicinal products" (EMEA/HMPC/241953/2005).
- 65 This revised guideline outlines the principles for uniform declaration of herbal substances/preparations in
- 66 herbal medicinal products as well as in traditional herbal medicinal products. It focuses on the different
- 67 types of herbal substances/preparations in relation to the quality documentation given. Examples of
- 68 declaration of such active substances are provided. The main guideline describes declaration in the SPC.
- 69 Guidance on package leaflets, labelling and other herbal specific provisions, for SPC, package leaflets and
- 70 labelling, have been added in Annex 1.
- 71 The guideline should be read in conjunction with current EU/(V)ICH guidelines.

#### 72 1. INTRODUCTION

Common criteria for the declaration shall ensure clear differentiation between different types of herbal
 substances/preparations and proper description of their qualitative and quantitative particulars. As a result,

a precise and consistent description of active substances of herbal medicinal products will be guaranteedwithin the Community.

77 The complex composition of herbal substances/preparations, which is essentially determined by various

factors like the production process, the extraction solvent, the genuine drug extract ratio (DER genuine),

and the type/physical state of the herbal substances/preparations, needs to be stated to guarantee

80 identification and facilitate comparison of herbal substances/preparations. However, it is not feasible to

- provide full characterisation in the declaration as the declaration should be kept as short and precise as
   possible.
- 83 The declaration is primarily intended to describe the identity and quantity of the herbal 84 substance/preparation, being the active substance of the herbal medicinal product and should focus on 85 those characteristics found to be useful in ensuring the safety and efficacy of the herbal 86 substance/preparation and herbal medicinal product.

87 Therefore, a declaration system has been established which reflects the main characteristics of herbal 88 substances/preparations as defined in the respective specifications. For this purpose, general guidance as

given in the European Pharmacopeoia (particularly the monographs "Extracts", "Herbal Drugs", "Herbal

Drug Preparations", and "Herbal Teas") as well as in the guidelines listed under *References*, should be followed.

#### 92 **2. SCOPE**

93 This guideline addresses the declaration of herbal substances/preparations when being the active substance
94 of a herbal medicinal product. Examples of standardised, quantified, and other herbal
95 substances/preparations are given.

- The main guideline addresses only the declaration of herbal substances/preparations in herbal medicinal products (including fixed combinations) in the SPC, whereas declaration in package leaflet and labelling is addressed in *Annex 1*. It shall apply to herbal medicinal products both for human and veterinary use and to
- 99 traditional herbal medicinal products for human use. Traditional herbal medicinal products may 100 additionally contain vitamins and/or minerals. Declaration of these chemically defined substances is not 101 covered by this guideline. Reference is given to the INN-system and to "A guideline on summary of
- 102 product characteristics".
- 103 This guideline reflects the current state of the art at the time it has been written. If necessary, the national
- regulatory authority/HMPC should be asked for additional guidance, especially in those cases not covered
- 105 by examples in the guideline.
- 106

#### 107 **3. LEGAL BASIS**

This guideline supports applications for marketing authorisations or registrations according to Directive
 2001/83/EC and Directive 2001/82/EC as amended.

110 A simplified registration procedure was established for traditional herbal medicinal products for human

111 use under Directive 2001/83/EC as amended by Directive 2004/24/EC. The principals for declaration of

herbal substances/preparations in herbal medicinal products apply equally to such traditional herbal

113 medicinal products for human use.

#### **114 4. MAIN GUIDELINE TEXT**

115 This guideline presents a brief definition of each concept and gives examples of the declaration in the 116 SPC. Generally, if the classification of a herbal preparation is not unambiguous, alternative proposals 117 should be justified by the applicant and approved by the regulatory authority before being put into effect.

118 In the different chapters the characteristics, which are generally needed for the declaration of the different

kinds of herbal substances/preparations, are given, followed by examples. The examples in the guideline

are for illustration purposes only and not intended to reflect binding specifications. Within each example it is shown, what information is needed to form the specific declaration of the active substance of the herbal

medicinal product in section 2 of the SPC. In this context it is pointed out that both excipients for

adjustment (valid for standardised herbal preparations only) and/or other excipients (e.g. carrier

- substances) must be declared in section 6.1 of the SPC, preferably listed with a subtitle "excipients of the
- herbal substance/preparation". Extraction solvents are to be declared in section 2 of the SPC only.

126 Furthermore, section 5.3 of the (human) SPC provides for the possibility to inform on limits of unwanted

127 (i. e. toxicologically relevant) constituents of herbal substances/preparations for safety reasons, provided

128 that these limits are laid down in the specification as part of the quality documentation.

#### 129 5. DECLARATION OF HERBAL SUBSTANCES IN THE SPC

130 It should be noted that this section does not apply to a herbal substance being the starting material of aherbal preparation.

132 The declaration of a herbal substance should cover the name and the quantity of the herbal substance. The 133 name of the herbal substance is the scientific Latin name of the plant species according to the binomial 134 system (genus, species, variety and author) with the Latin term of the plant part, followed by the 135 [translated] common name of the monograph of the European Pharmacopoeia if available, or else of the 136 Pharmacopoeia of a Member State, if available, or else the common name of the herbal substance (in 137 brackets). In those special cases, where many different Latin plant species apply to the same herbal 138 substance, the list of Latin names could be shortened to the genus name followed by the word "species", 139 e.g. "Crataegus species". This option is only applicable in cases, where no restrictions concerning the 140 species used are known from the quality documentation. In special cases, where necessary, only the 141 scientific Latin name of the plant species may be used together with the [translated] common term for the 142 plant part. For specific types of herbal substances (e.g. standardised, quantified) additional information 143 may be necessary.

- 144 The following characteristics have to be stated in the declaration:
- 145 1. Name of the herbal substance.
- 146 2. Quantity of the genuine herbal substance.
- 147
  148
  3. Name and quantity of the constituent(s) with known therapeutic activity (standardised herbal substances), if applicable.
- 1494. Name and quantity (given as a range) of the active markers (quantified herbal substances), ifapplicable.
- 151

#### 152 **5.1 Standardised herbal substances**

153 Standardised herbal substances are adjusted within an acceptable tolerance to a given content of 154 constituents with known therapeutic activity; standardisation is achieved by adding excipients for 155 adjustment to the herbal substance or by blending batches of the herbal substance.

- 156 For such herbal substances the name and content of the constituent(s) with known therapeutic activity
- 157 should be stated. The equivalent quantity of the genuine herbal substance should be given (as a range, if
- applicable).
- 159
- 160 Example:
- 161 Where a herbal medicinal product contains:
- 162 Senna leaf, cut.
- 163 Constituents with known therapeutic activity: 2.55 % hydroxyanthracene glycosides, calculated as
- 164 sennoside B.
- 165 Quantity of the genuine herbal substance as a range: 85 96 %.
- 166 Excipients for adjustment: 4 15 %.
- 167 Quantity of the standardised herbal substance (herbal substance and excipients for adjustment) in the
- 168 herbal medicinal product: 1.3 g/sachet.
- 169

170 The declaration in section 2 of the SPC of the herbal medicinal product is:

- 171 1 tea sachet contains 1.10 g 1.25 g Cassia senna L. (C. acutifolia Delile) and/or Cassia angustifolia
- 172 Vahl, folium (Senna leaf), corresponding to 33 mg hydroxyanthracene glycosides, calculated as sennoside173 B.

#### 174 **5.2.** Quantified herbal substances

Quantified herbal substances are adjusted to a defined range of constituents; adjustments are made byblending batches of herbal substances used in the manufacturing process.

- For quantified herbal substances the name of the active markers should be stated and their content should
- be given in a range. The equivalent quantity of the genuine herbal substance should be given.
- 179

180 <u>Example:</u>

- 181 Where a herbal medicinal product contains:
- 182 Willow bark, cut.
- 183 Quantification: 1.5 1.7 % of total salicylic derivatives calculated as salicin.
- 184 Quantity of the herbal substance in the herbal medicinal product: 3.0 g/sachet.
- 185
- 186 The declaration in section 2 of the SPC of the herbal medicinal product is:
- 187 1 tea sachet contains 3.0 g of various species of genus *Salix* including *S. purpurea* L., *S. daphnoides* Vill.
- and *S. fragilis* L., cortex (Willow bark), corresponding to 45 mg to 51 mg of total salicylic derivatives, calculated as salicin.
- 190

#### 191 **5.3 Other herbal substances**

192 For other herbal substances neither constituents with known therapeutic activity nor active markers are

193 generally known. Therefore these herbal substances are essentially defined by their production process 194 and their specifications.

- For other herbal substances the name and content of the analytical marker(s) should not be stated. The quantity of the genuine herbal substance should be given.
- 197
- 198 Example:
- 199 Where a herbal medicinal product contains:
- 200 100 g Linseed.
- 201 Quantity of the herbal substance in the herbal medicinal product: 1 g/g.
- 202

#### 203 The declaration in section 2 of the SPC of the herbal medicinal product is:

204 1 g herbal medicinal product contains 1 g *Linum usitatissimum* L., semen (Linseed).

#### 205 6. DECLARATION OF HERBAL PREPARATIONS IN THE SPC

206 Herbal preparations are diverse in character ranging from simply processed, comminuted plant material to complex processed preparations such as refined extracts. The declaration of a herbal preparation should 207 208 cover the name of the herbal substance and the definition of the herbal preparation including the physical 209 state, ratio of herbal substance to genuine herbal preparation (DER genuine, also named native DER), and 210 extraction solvent(s) if appropriate. The name of the herbal substance is the scientific Latin name of the 211 plant species according to the binomial system (genus, species, variety and author) with the Latin term of 212 the plant part, followed by the [translated] common name of the monograph of the European 213 Pharmacopoeia if available, or or else of the Pharmacopoeia of a Member State, if available, or else the 214 common name of the herbal substance (in brackets). In those special cases, where many different Latin 215 plant species apply to the same herbal substance, the list of Latin names could be shortened to the genus name followed by the word "species", e.g. "Crataegus species". This option is only applicable in cases, 216 217 where no restrictions concerning the species used are known from the quality documentation. In special 218 cases, where necessary, only the scientific Latin name of the plant species may be used together with the 219 [translated] common term for the plant part.

- In addition, the declaration of herbal preparations needs to reflect the different extract type (type of herbal
   preparation) as described in the European Pharmacopoeia.
- (i) 'Standardised herbal preparations': are adjusted within an acceptable tolerance to a given content of
   constituents with known therapeutic activity; standardisation is achieved by adding excipients for
   adjustment to the herbal preparations or by blending batches of herbal preparations/herbal substances used
   in the manufacturing process.
- For such preparations the name and content of the constituent(s) with known therapeutic activity should be stated. The equivalent quantity of the genuine herbal preparation should be given (as a range, if applicable).
- (ii) 'Quantified herbal preparations': are adjusted to a defined range of constituents (active markers);
   adjustments are made by blending batches of herbal preparations/herbal substances used in the
   manufacturing process.
- 232 For such preparations the name and content of the active markers should be stated in a range. The
- 233 equivalent quantity of the genuine herbal preparation should be stated, quoting either the corresponding
- amount of herbal substance (given as a range) or the DER genuine.

- (iii) 'Other herbal preparations': are essentially defined by their production process and theirspecifications.
- 237 For such preparations the name and content of the analytical marker(s) should not be stated. The quantity
- 238 of the genuine herbal preparation should be stated, quoting either the corresponding amount of herbal
- substance (given as a range) or the DER genuine.
- 240 When solvent(s) are used in the manufacture of a herbal preparation (extraction solvent(s)), the name and
- 241 composition of the solvent(s) used in the first extraction step should be included in the declaration of the
- 242 herbal medicinal product. If purification procedures are used in the manufacture of a herbal preparation,
- the word "refined" should be added to the name of the herbal preparation, where applicable.
- In the SPC the following wording can be used, as appropriate: "Extraction solvent: <NAME>
   <COMPOSITION> % V/V" (or % m/m, as applicable).
- 246 If a fresh herbal substance is used as a starting material for manufacture of the herbal preparation, this 247 should be added to the name of the herbal preparation, as appropriate.
- 248 **6.1** Herbal preparations consisting of comminuted or powdered herbal substances
- 249 The following characteristics have to be stated in the declaration:
- 1. Name of the herbal substance used.
- 251 2. Physical state of the herbal preparation, if relevant.
- 252 3. Quantity of the genuine herbal preparation.
- A. Name and quantity of the constituent(s) with known therapeutic activity (standardised herbal preparations), if applicable.
  - 5. Name and quantity (given as a range) of the active markers (quantified herbal preparations), if applicable.
- 257 **6.1.1 Standardised herbal preparations**
- 258

255

256

- 259 Example a): Standardisation by adding excipients for adjustment
- 260 Where a herbal medicinal product contains:
- 261 Senna leaf, powdered.
- 262 Tinnevelly Senna pods, powdered.
- 263 Constituents with known therapeutic activity: 3.5 % hydroxyanthracene glycosides, calculated as
- sennoside B.
- 265 Quantity of the genuine herbal preparation as a range: 70 95 % (mixture of both senna preparations).
- Excipients for adjustment: 5 30 %.
- 267 Other excipients: 0 %.
- 268 Quantity of the standardised herbal preparation (genuine herbal preparation + excipients for adjustment) in
- the herbal medicinal product: 1 g/g (200 mg Senna leaf, 500 mg 750 mg Tinnevelly Senna pods and 50  $\frac{1}{200}$
- mg 300 mg excipients for adjustment).
- 272 The declaration in section 2 of the SPC of the herbal medicinal product is:

273 1 g powder contains 200 mg Cassia senna L. (C. acutifolia Delile) and/or Cassia angustifolia Vahl,

folium (Senna leaf) and 500 mg - 750 mg *Cassia angustifolia* Vahl, fructus (Tinnevelly Senna pods), corresponding to 35 mg hydroxyanthracene glycosides, calculated as sennoside B.

- 276 Example b): Standardisation by mixing herbal preparations
- 277 Where a herbal medicinal product contains:
- 278 Senna leaf, powdered.
- 279 Tinnevelly Senna pods, powdered.
- 280 Alexandrian Senna pods, powdered.
- 281 Constituent(s) with known therapeutic activity: 2.7 % hydroxyanthracene glycosides, calculated as
- 282 sennoside B.
- 283 Quantity of the genuine herbal preparation (as a range): 100 % genuine herbal preparation (mixture of all
- 284 three senna preparations).
- 285 Other excipients: 0 %.
- 286 Quantity of the genuine standardised herbal preparation in the herbal medicinal product: 1 g/g (200 mg 287 Senna leaf, 500 mg - 750 mg Tinnevelly Senna pods, and 50 mg - 300 mg Alexandrian Senna pods).
- The declaration in section 2 of the SPC of the herbal medicinal product is: 288
- 289 1 g powder contains 200 mg Cassia senna L. (C. acutifolia Delile) and/or Cassia angustifolia Vahl,
- 290 folium (Senna leaf), 500 mg - 750 mg Cassia angustifolia Vahl, fructus (Tinnevelly Senna pods) and 50
- mg 300 mg Cassia senna L. (C. acutifolia Delile), fructus (Alexandrian Senna pods), corresponding to 291 292
- 27 mg hydroxyanthracene glycosides, calculated as sennoside B.

#### 293 6.1.2 **Quantified herbal preparations**

- 294 Example:
- Where a herbal medicinal product contains: 295
- 296 Willow bark, powdered.
- 297 Quantification: 1.5 - 1.7 % of total salicylic derivatives, calculated as salicin.
- 298 Other excipients: 0 %.
- 299 Quantity of the genuine herbal preparation in the herbal medicinal product: 2.5 g/sachet.
- 300
- The declaration in section 2 of the SPC of the herbal medicinal product is: 301
- 1 tea sachet contains 2.5 g of various species of genus Salix including S. purpurea L., S. daphnoides Vill. 302
- 303 and S. fragilis L, cortex (Willow bark), corresponding to 37.5 mg to 42.5 mg of total salicylic derivatives, calculated as salicin. 304
- 305 6.1.3 Other herbal preparations
- 306 Example:
- Where a herbal medicinal product contains: 307
- Valerian root, powdered. 308
- 309 Other excipients: 0 %.
- 310 Quantity of the genuine herbal preparation in the herbal medicinal product: 300 mg/capsule.
- 311 The declaration in section 2 of the SPC of the herbal medicinal product is:
- 312 1 capsule contains 300 mg of Valeriana officinalis L. s.l., radix (Valerian root).
- 313

# 3146.2Herbal preparations produced by steps which exceed comminution/powdering (e.g.315extracts)

- 316 The following characteristics have to be stated in the declaration:
- 317 1. Name of the herbal substance used.
- 318 2. Type/physical state of the herbal preparation.
- 319 3. Quantity of the genuine herbal preparation.
- 320
   321
   4. Name and quantity of the constituent(s) with known therapeutic activity (standardised herbal preparations), if applicable.
- 322 5. Name and quantity (given as a range) of the active markers (quantified herbal preparations), if
   323 applicable.
- 324
  325
  6. Drug extract ratio (DER genuine) or equivalence in the quantity of the herbal substance (as a range) (quantified and other herbal preparations).
- 326 7. Name and composition of extraction solvent(s).

#### 327 6.2.1 Standardised extracts

#### 328 Example:

### 329 Where a herbal medicinal product contains:

- 330 Dry extract from Horse chestnut seed
- 331 Constituent(s) with known therapeutic activity: 19 % triterpene glycosides, calculated as anhydrous β-
- aescin.
- 333 Quantity of the genuine extract (as a range): 70 95 % genuine extract.
- 334 DER genuine: 5 8 : 1.
- 335 Excipients for adjustment: 30 5 %.
- Other excipients: 0 %.
- 337 Extraction solvent: Methanol 80 % V/V.
- 338 Quantity of the standardised extract (genuine herbal preparation and excipients for adjustment) in the
- herbal medicinal product: 200 mg/capsule.
- 340 The declaration in section 2 of the SPC of the herbal medicinal product is:
- 1 capsule contains 140 mg 190 mg of extract (as dry extract) from Aesculus hippocastanum L., semen
- 342 (Horse chestnut seed) corresponding to 38 mg triterpene glycosides, calculated as anhydrous β-aescin.
- 343 Extraction solvent: Methanol 80 % V/V.

#### 344 6.2.2 Quantified extracts

345 Example:

## 346 Where a herbal medicinal product contains:

- 347 Dry extract from Ginkgo leaf, refined.
- 348 Quantity of the genuine extract: 100 % genuine extract.
- 349 DER genuine: 35 67 : 1.
- 350 Quantification: 22.0 to 27.0 % of flavonoids expressed as flavone glycosides.
- 351 2.8 to 3.4 % of ginkgolides A, B and C.
- 352 2.6 to 3.2 % of bilobalide.
- 353 Other excipients: 0 %.
- 354 First extraction solvent: Acetone 60 % m/m.
- 355 Quantity of the genuine quantified extract in the herbal medicinal product: 60 mg/capsule.

- 356 The declaration in section 2 of the SPC of the herbal medicinal product is:
- 357 1 capsule contains 60 mg of extract (as dry extract, refined) from *Ginkgo biloba* L., folium (Ginkgo leaf) 358 (35-67:1), corresponding to:
- 359 13.2 mg to 16.2 mg of flavonoids expressed as flavone glycosides
- 360 1.68 mg to 2.04 mg of ginkgolides A, B and C
- 1.56 mg to 1.92 mg of bilobalide. 361
- 362 First extraction solvent: Acetone 60 % m/m.

363 or

- 364 1 capsule contains 60 mg of extract (as dry extract, refined) from Ginkgo biloba L., folium (equivalent to
- 365 2.1 g - 4.0 g of Ginkgo leaf), corresponding to:
- 13.2 mg to 16.2 mg of flavonoids expressed as flavone glycosides 366
- 367 1.68 mg to 2.04 mg of ginkgolides A. B and C
- 1.56 mg to 1.92 mg of bilobalide. 368
- 369 First extraction solvent: Acetone 60% m/m.
- 370 6.2.3 **Other extracts**
- 371 **Example a: Other extracts such as dry extracts**
- 372 Where a herbal medicinal product contains:
- 373 Dry extract from Valerian root.
- 374 Ouantity of the genuine extract: 80 % genuine extract.
- 375 DER genuine: 3 - 6 : 1
- 376 Other excipients: 20 %.
- 377 Extraction solvent: Ethanol 70 % V/V.
- Quantity of the dry extract (genuine herbal preparation and other excipients) in the herbal medicinal 378
- 379 product: 200 mg/capsule.
- The declaration in section 2 of the SPC of the herbal medicinal product is: 380
- 1 capsule contains 160 mg of extract (as dry extract) from Valeriana officinalis L. s.l., radix (Valerian 381 382 root) (3 - 6 : 1).
- 383 Extraction solvent: Ethanol 70 % V/V.
- 384 or
- 385 1 capsule contains 160 mg of extract (as dry extract) from Valeriana officinalis L. s.l., radix (equivalent to
- 386 480 mg – 960 mg of Valerian root).
- Extraction solvent: Ethanol 70 % V/V. 387

#### 388 **Example b): Other extracts such as liquid extracts**

- 389 Where a herbal medicinal product contains:
- 390 Liquid extract from Matricaria flower..
- 391 Quantity of the genuine extract: 100 % genuine extract.
- 392 DER genuine: 1:1.
- 393 Other excipients: 0 %.
- Extraction solvent: 394 2.5 parts ammonia solution 10 % m/m 395
  - 50 parts of ethanol 96 % V/V
- 396 47.5 parts of water.
- 397 Quantity of the genuine liquid extract in the herbal medicinal product: 1 ml/ml.
- 398 The declaration in section 2 of the SPC of the herbal medicinal product is:

- 399 1 ml [≃ ... g] of oral liquid contains 1 ml of liquid extract from Matricaria recutita L. (Chamomilla
- 400 *recutita* (L.) Rauschert), flos (Matricaria flower) (1 : 1).
- 401 Extraction solvent: Ammonia solution 10 % m/m / ethanol 96 % V/V / water (2.5/50/47.5).
- 402 or
- 403 1 ml [≃ ... g] of oral liquid contains 1 ml of liquid extract from Matricaria recutita L. (Chamomilla
- 404 *recutita* (L.) Rauschert), flos (equivalent to 1 g Matricaria flower).
- 405 Extraction solvent: Ammonia solution 10 % m/m / ethanol 96 % V/V / water (2.5/50/47.5).

#### 406 **Example c: Other extracts such as tinctures**

#### 407 *Where a herbal medicinal product contains:*

- 408 Tincture from Valerian root.
- 409 Quantity of the genuine extract: 100 % genuine extract.
- 410 DER genuine: 1 : 4.0 4.5.
- 411 Other excipients: 0 %.
- 412 Extraction solvent: Ethanol 70 % V/V.
- 413 Quantity of the tincture in the herbal medicinal product: 1 ml/ml.
- 414 *The declaration in section 2 of the SPC of the herbal medicinal product is:*
- 415 1 ml [≅ ... g] of oral liquid contains 1 ml of tincture from *Valeriana officinalis* L. s.l., radix (Valerian root)
- 416 (1:4.0-4.5).
- 417 Extraction solvent: Ethanol 70 % V/V.
- 418 **or**

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- 419 1 ml [≅ ... g] of oral liquid contains 1 ml of tincture from Valeriana officinalis L. s.l., radix (equivalent to
- 420 220 mg 250 mg Valerian root).
- 421 Extraction solvent: Ethanol 70 % V/V.

#### 422 Example d: Other extracts such as dry extracts from a mixture

- 423 *Where a herbal medicinal product contains:*
- 424 Dry extract from 3 parts Valerian root
- 425 2 parts Hop strobile
  - 2 parts Melissa leaf.
- 427 Quantity of the genuine extract: 80 % genuine extract.
- 428 DER genuine: 4 7 : 1.
- 429 Other excipients: 20 %.
- 430 Extraction solvent: Ethanol 70 % V/V.
- 431 Quantity of the dry extract (genuine herbal preparation and other excipients) in the herbal medicinal
- 432 product: 200 mg/capsule.
- 433 The declaration in section 2 of the SPC of the herbal medicinal product is:
- 434 1 capsule contains 160 mg of extract (as dry extract) (4 7 : 1) from Valeriana officinalis L. s.l., radix
- 435 (Valerian root) / Humulus lupulus L., flos (Hop strobile) / Melissa officinalis L., folium (Melissa leaf)
  436 (3/2/2).
- 437 Extraction solvent: Ethanol 70 % V/V.
- 438 or
- 439 1 capsule contains 160 mg of extract (as dry extract) (equivalent to 0.64 g 1.1 g mixture of the herbal 440 substances) from *Valeriana officinalis* L. s.l., radix (Valerian root) / *Humulus lupulus* L., flos (Hop
- 441 strobile) / *Melissa officinalis* L, folium (Melissa leaf) (3/2/2).

442	Extraction solvent: Ethanol 70 % V/V.
443	6.3 Herbal preparations not covered by 6.1 or 6.2
444	The following characteristics have to be stated in the declaration:
445	1. Name of the herbal substance used.
446	2. Type of the herbal preparation.
447	3. Quantity of the genuine herbal preparation.
448 449	4. Drug extract ratio (DER genuine) or equivalent quantity of the herbal substance (as a range), if applicable.
450	5. Name and composition of extraction solvent(s), if applicable.
451	6.3.1 Other herbal preparations such as essential oils
452	Example:
453	Where a herbal medicinal product contains:
454	Peppermint oil.
455	Quantity of the essential oil: 100 % essential oil.
456	Other excipients: 0 %.
457	Quantity of the essential oil in the herbal medicinal product: 81 mg/ml oral liquid.
458	The declaration in section 2 of the SPC of the herbal medicinal product is:
459	1 ml [ $\cong$ g] of oral liquid contains 81 mg of <i>Mentha</i> × <i>piperita</i> L., aetheroleum (peppermint oil).
460	6.3.2 Other herbal preparations such as expressed juices
461	Example:
462	Where a herbal medicinal product contains:
463	Expressed juice from fresh purple coneflower herb.
464	Quantity of the genuine expressed juice:100% genuine expressed juice.
465	DER genuine: 1.2 - 1.5 : 1.
466	Other excipients: 0 %.
467	Quantity of the genuine expressed juice in the herbal medicinal product: 1 ml/ml oral liquid.
468	The declaration in section 2 of the SPC of the herbal medicinal product is:
469 470	1 ml [ $\cong$ g] of oral liquid contains 1 ml of expressed juice from <i>Echinacea purpurea</i> (L.) Moench, herba (fresh purple coneflower herb) (1.2 - 1.5 : 1).
471	or
472 473	Each 1 ml [ $\cong$ g] of oral liquid contains 1 ml of expressed juice from <i>Echinacea purpurea</i> (L.) Moench, herba (equivalent to 1.2 g – 1.5 g fresh purple coneflower herb).
474	6.3.3 Other herbal preparations such as processed exudates
475	Example:
476	Where a herbal medicinal product contains:
477	Tincture from Myrrh.
478	Quantity of the processed exudate: 100 % processed exudate.
479	DER genuine: 1 : 4.0 - 4.5.
480	Other excipients: 0 %.

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- 481 Extraction solvent: Ethanol 90 % V/V.
- 482 Quantity of the tincture in the herbal medicinal product: 25 mg/ml oral liquid.
- 483 The declaration in section 2 of the SPC of the herbal medicinal product is:
- 484 1 ml [≃ ... g] of oral liquid contains 25 mg of tincture from *Commiphora molmol* Engler and/or other
- 485 species of *Commiphora* (Myrrh) (1 : 4.0 4.5).
- 486 Extraction solvent: Ethanol 90 % V/V.
- 487 **or**
- 488 Each ml  $[\cong ... g]$  of oral liquid contains 25 mg of tincture from *Commiphora molmol* Engler and/or other
- 489 species of *Commiphora* (equivalent to 5.5 mg 6.3 mg Myrrh).
- 490 Extraction solvent: Ethanol 90 % V/V.

#### 491 **DEFINITIONS**

492 **Constituents with known therapeutic activity:** are chemically defined substances or groups of 493 substances which are generally accepted to contribute substantially to the therapeutic activity of a 494 herbal substance, a herbal preparation or a herbal medicinal product.

495 **Declaration:** A statement of the content of the active substance(s) expressed qualitatively and 496 quantitatively per dosage unit, per unit of volume or weight according to the dosage form.

497 Drug extract ratio (DER): means the ratio between the quantity of herbal substance used in the 498 manufacture of a herbal preparation and the quantity of herbal preparation obtained. The number 499 (given as the actual range) written before the colon is the relative quantity of the herbal substance; the 500 number written after the colon is the relative quantity of the herbal preparation obtained.

501 **Excipients:** In general, excipients may be defined as constituents of the medicinal product other than the 502 active substance(s). However, in the context of this guideline only two categories of excipients are 503 addressed:

- 504 *Excipients for adjustment* are used for standardisation of herbal substances/preparations.
- 505 *Other excipients* are technological excipients (e.g. carrier substances) which may be part of herbal 506 preparations.
- 507 **Extraction solvents:** are solvents which are used for the extraction process.

508 **Genuine (Native) herbal preparation:** refers to the preparation without excipients, even if for 509 technological reasons the genuine herbal preparation is not available. However, for soft and liquid herbal 510 preparations the genuine herbal preparation may contain variable amounts of (extraction) solvent.

511 Ratio of herbal substance to genuine herbal preparation (DER genuine): is the ratio of the quantity of 512 the herbal substance to the quantity of the resulting genuine herbal preparation. The number (given as the 513 actual range) written before the colon is the relative quantity of the herbal substance; the number written 514 after the colon is the relative quantity of the genuine herbal preparation obtained.

515 **Herbal medicinal products:** any medicinal product, exclusively containing as active substances one or 516 more herbal substances or one or more herbal preparations, or one or more such herbal substances in 517 combination with one or more such herbal preparations.

518 **Herbal preparations:** are obtained by subjecting herbal substances to treatments such as extraction, 519 distillation, expression, fractionation, purification, concentration or fermentation. These include 520 comminuted or powdered herbal substances, tinctures, extracts, essential oils, expressed juices and 521 processed exudates.

522 **Herbal substances:** all mainly whole, fragmented or cut plants, plant parts, algae, fungi, lichen in an 523 unprocessed, usually dried form but sometimes fresh. Certain exudates that have not been subjected to a 524 specific treatment are also considered to be herbal substances. Herbal substances are precisely defined by 525 the plant part used and the botanical name according to the binomial system (genus, species, variety and 526 author).

Herbal teas: consist exclusively of one or more herbal substance(s) intended for oral aqueous
 preparations by means of decoction, infusion or maceration. The preparation is prepared immediately
 before use. Herbal teas are usually supplied in bulk form or in sachets.

530 **Markers:** are chemically defined constituents or groups of constituents of a herbal substance, a herbal 531 preparation or a herbal medicinal product which are of interest for control purposes independent of 532 whether they have any therapeutic activity. Markers serve to calculate the quantity of herbal substance(s) 533 or herbal preparation(s) in the herbal medicinal product if the marker has been quantitatively determined

- 534 in the herbal substance or herbal preparation.
- 535 There are two categories of markers:
- 536 *Active markers* are constituents or groups of constituents which are generally accepted to contribute to

- 537 the therapeutic activity.
- 538 *Analytical markers* are constituents or groups of constituents that serve for analytical purposes.

539 **Quantification:** means adjusting the herbal substance or herbal preparation to a defined range of 540 constituents (active markers) exclusively achieved by blending different batches of herbal substances 541 and/or herbal preparations (e.g. quantified extract).

**Specification:** A list of tests, references to analytical procedures, and appropriate acceptance criteria which are numerical limits, ranges, or other criteria for the tests described. It establishes the set of criteria to which a herbal substance/preparation or herbal medicinal product should conform to be considered acceptable for its intended use. "Conformance to specifications" means that the herbal substance/preparation and/or herbal medicinal product, when tested according to the listed analytical procedures, will meet the listed acceptance criteria. Specifications are binding quality standards that are agreed to between the appropriate governmental regulatory agency and the applicant.

549 **Standardisation:** means adjusting the herbal substance/preparation to a defined content of a constituent 550 or a group of constituents with known therapeutic activity respectively either by adding excipients or by 551 blending batches of the herbal substance and/or herbal preparation (e.g. standardised extracts).

552 **Strength:** The content of the active substance(s) expressed quantitatively per dosage unit, per unit of volume or weight according to the dosage form.

554 **Traditional herbal medicinal products:** are medicinal products for human use that fulfil the conditions 555 laid down in article 16a (1) of Directive 2001/83/EC, as amended.

#### 556 **REFERENCES**

- "Guideline on specifications: Test procedures and acceptance criteria for herbal substances, herbal
   preparations and herbal medicinal products/traditional herbal medicinal products" (CPMP/QWP/2820/00
   Rev.1 and EMEA/CVMP/815/00 Rev.1).
- 560 "Guideline on quality of herbal medicinal products/traditional herbal medicinal products" 561 (CPMP/QWP/2819/00 Rev.1 and EMEA/CVMP/814/00 Rev.1).
- 562 "A Guideline on Summary of Product Characteristics" (Human Medicinal Products) Eudralex Vol. 2C,563 current version.
- "Guideline on Summary of Product Characteristics (SPC) Pharmaceuticals" (Veterinary Medicinal
  Products) Eudralex Volume 6C, current version.
- 566 "Concept paper on the declaration of herbal substances/herbal preparations in finished herbal medicinal
   567 products" (EMEA/HMPC/241953/2005).

- 568 ANNEX 1
- 569 DECLARATION IN THE PACKAGE LEAFLET AND LABELLING

#### 570 **1.** Introduction

571 Suitable declaration of herbal substances and herbal preparations in herbal medicinal products should be 572 included in the package leaflets and product labelling. The declaration should follow the regulations of 573 Directive 2001/83/EC and Directive 2001/82/EC as amended, and it should be consistent with the 574 declaration given in the SPC. Therefore, overall the declaration in the SPC should form the basis of the 575 declaration in the package leaflet and labelling.

576 The main guideline on declaration in the SPC was developed to obtain an agreed view in the 577 harmonisation process for herbal medicinal products. Likewise, harmonisation of the declaration in 578 package leaflet and labelling is desirable. As the declaration should be as precise as possible, satisfactory 579 declaration of a herbal medicinal product is most often extensive and requires much space in writing. 580 Therefore, declaration in labelling could be <u>abbreviated</u>, although still in line with the principles of the 581 main guideline for the SPC.

- 582 This annex focuses on acceptable abbreviation in the declaration in the package leaflet and labelling 583 compared to the declaration in the SPC.
- In general, due to different national traditions, the exact wording and the order of the elements of the declaration could be different from the SPC. However, it should be ensured that the information and meaning is the same as in the SPC. No new information is allowed to be added compared to the SPC.
- 587 For requirements on Braille, see separate guidance documents.

#### 588 2. Declaration of herbal medicinal products - in package leaflets

589 Because writing space is not a limiting factor for package leaflets, the declaration in the package leaflet 590 should be the same as the one given in the SPC section 2.

#### 591 **3. Declaration of herbal medicinal products - in labelling**

As the size of the immediate and outer packaging is limited, the space on the label is likewise limited. Therefore the declaration may be **abbreviated**, provided that this will not affect the safe use of the product.

#### 595 **Examples of abbreviated declaration in labelling:**

- 596 Wherever possible the labelling should include the plant name(s) stated in the SPC unless otherwise 597 authorised by the competent authority.
- 598 The extraction solvent may be omitted, if justified.
- 599 The physical state of a herbal preparation may be omitted, e.g. "extract (as dry extract)" may be 600 abbreviated to "extract".
- 601 If justified for a herbal preparation, the equivalent quantity of the herbal substance may be replaced by the
- 602 ratio of the herbal substance to the genuine herbal preparation and vice versa, in this case the SPC should 603 include both versions.
- 604 **4.** Strength of herbal medicinal products in the SPC, package leaflets and labelling
- In general for a medicinal product, the (invented) product name should be followed by its strength, cf. Dir.
  2001/83/EC; article 54, 55 and 59 and Dir. 2001/82/EC; article 58, 59, 60 and 61.
- For herbal medicinal products this requirement is normally not appropriate: The declaration in the SPC most often includes more than one quantity (mass). For e.g. a quantified extract the declaration includes both the quantity of active marker(s), the quantity of the genuine extract and the equivalent quantity of the
- 610 herbal substance (or DERgenuine). So if the name is to be followed by the strength expressed as a single
- 611 unspecified mass (e.g. 40 mg), the meaning will not be clear and could be misleading. This could create

- 612 confusion to the patients and other readers. In conclusion, the 'invented' product name should not be
- 613 followed by a designation 'strength', but the quantitive composition would be fully detailed in the
- 614 declaration of the product.

#### 5. "Common names" of active substances – in the SPC, package leaflets and labelling

- 616 In general, if the name of a medicinal product is an invented name, the product name should be followed
- by the international non-proprietary name (INN) for each active substance, cf. Article 54, 55 and 59 of
- 618 Directive 2001/83/EC, as amended and Article 58, 59, 60 and 61 of Directive 2001/82/EC, as amended.

As no INN's for herbal substances or herbal preparations exist, it is recommended to use an abbreviated

620 form of the name for the active substance, for example "valerian dry extract" or "valerian tincture" (for

- 621 package leaflet when the product contains only one active substance; for labelling when the product
- 622 contains up to 3 active substances). The name of an active substance in the declaration of the product
- 623 should be based on the name given in the declaration in section 2 of the SPC.