

2 February 2016 EMA/HMPC/572974/2014 Committee on Herbal Medicinal Products (HMPC)

# European Union herbal monograph on *Ricinus communis* L., oleum

#### Final

Discussion in Working Party on European Union monographs and list	September 2014
(MLWP)	November 2014
	March 2015
	May 2015
Adoption by Committee on Herbal Medicinal Products (HMPC) for release	7 July 2015
for consultation	7 July 2015
Start of public consultation	22 July 2015
End of consultation (deadline for comments <sup>1</sup> )	31 October 2015
Rediscussion in MLWP	November 2015
Adoption by HMPC	2 February 2016

Keywords	Herbal medicinal products; HMPC; European Union herbal monographs; well
	established medicinal use; Ricinus communis L., oleum; Ricini oleum, castor oil

BG	(b	ulga	rski	):	Ри	цин	ОВ	0	масло	
		v .								

CS (čeština): ricinový olej DA (dansk): Ricinusolie

DE (Deutsch): Natives Rizinusöl

EL (elliniká): Ἑλαιο κρότωνος (κικινέλαιο - ρετσινόλαδο)

EN (English): castor oil ES (español): Aceite de ricino

ET (eesti keel): riitsinusõli FI (suomi): risiiniöljy

FR (français): Ricin (huile de) HR (hrvatski): ricinusovo ulje HU (magyar): ricinusolaj IT (italiano): Ricino olio LT (lietuvių kalba): Ricinų aliejus

LV (latviešu valoda): Rīcineļļa

MT (Malti): żejt ir-Riġnu

NL (Nederlands): Wonderolie, ricinusolie

PL (polski): olej rycynowy PT (português): Óleo-de-rícino RO (română): ulei de ricin SK (slovenčina): Ricínový olej

SL (slovenščina): ricinusovo olje

SV (svenska): Ricinolja

IS (íslenska):

NO (norsk): Ricinusolje

<sup>&</sup>lt;sup>1</sup> No comments were received during the period of public consultation. Therefore the final monograph is published together with the final assessment report and list of references, without an 'Overview of comments received during the public consultation'.



#### European Union herbal monograph on Ricini communis L., oleum

#### 1. Name of the medicinal product

To be specified for the individual finished product.

## 2. Qualitative and quantitative composition<sup>2,3</sup>

Well-established use	Traditional use
With regard to the marketing authorisation application of Article 10a of Directive 2001/83/EC as amended	
Ricinus communis L., oleum (castor oil)	
i) Herbal substance	
Not applicable	
ii) Herbal preparation	
Fatty oil obtained from seeds of <i>Ricinus communis</i> L. by cold expression	

#### 3. Pharmaceutical form

Well-established use	Traditional use
Herbal preparations in liquid or solid dosage forms for oral use.	
The pharmaceutical form should be described by the European Pharmacopoeia full standard term.	

#### 4. Clinical particulars

#### 4.1. Therapeutic indications

Well-established use	Traditional use
Laxative for short term use in cases of occasional constipation.	

<sup>&</sup>lt;sup>1</sup> The declaration of the active substance(s) for an individual finished product should be in accordance with relevant herbal

quality guidance. <sup>2</sup> The material complies with the Ph. Eur. monograph (Ricini oleum virginale (ref.: 0051) or Ricini oleum raffinatum (ref.: 2367))

#### 4.2. Posology and method of administration

Well-established use	Traditional use
Posology	
Adults and elderly	
Daily dose: 2-5 g (2.1-5.3 ml) as a single dose	
Normally it is sufficient to take this medicinal product up to 2-3 times a week.	
The use in children and adolescents under 18 years of age is not recommended (see section 4.4 'Special warnings and precautions for use').	
Duration of use	
Use for more than 1 week requires medical supervision.	
If the symptoms persist during the use of the medicinal product, a doctor or a pharmacist should be consulted.	
Method of administration	
Oral use	
The onset time of defecation varies between 2-6 hours.	

#### 4.3. Contraindications

Well-established use	Traditional use
Hypersensitivity to the active substance.	
Cases of intestinal obstructions and stenosis,	
atony, appendicitis, inflammatory colon diseases	
(e.g. Crohn's disease, ulcerative colitis),	
abdominal pain of unknown origin, severe	
dehydration state with water and electrolyte	
depletion.	
Pregnancy and lactation (See section 5.3)	

#### 4.4. Special warnings and precautions for use

Well-established use	Traditional use
Long-term use of laxatives should be avoided. If laxatives are needed every day the cause of constipation should be investigated.	
If stimulant laxatives are taken for longer than a brief period, this may lead to impaired function of the intestine. Castor oil should only be used if a therapeutic effect cannot be achieved by a change of diet or the administration of bulk forming agents.	
The use in children and adolescents under 18 years of age has not been established due to lack of adequate data on safety and efficacy.	
If the symptoms worsen during the use of the medicinal product, a doctor or a pharmacist should be consulted.	

## 4.5. Interactions with other medicinal products and other forms of interaction

Well-established use	Traditional use
Hypokalaemia (resulting from long-term laxative abuse) potentiates the action of cardiac glycosides and interacts with antiarrhythmic medicinal products.	
Concomitant use with diuretics, adrenal corticosteroids and liquorice root may enhance loss of potassium.	
Concomitant use of antihistamines may reduce the laxative action of castor oil.	

#### 4.6. Fertility, pregnancy and lactation

Well-established use	Traditional use
The use during pregnancy is contraindicated because castor oil can influence the labour (see 5.3 'Preclinical safety data').	
The use during lactation is contraindicated because may pass into breast milk (see section 4.3 'Contraindication").	

Well-established use	Traditional use
No fertility data available.	

#### 4.7. Effects on ability to drive and use machines

Well-established use	Traditional use
No studies on the effect on the ability to drive and	
use machines have been performed.	

#### 4.8. Undesirable effects

Well-established use	Traditional use
Nausea, vomiting, abdominal pain and severe diarrhoea may occur. The frequency is not known. In such cases dose reduction is necessary.	
If other adverse reactions not mentioned above occur, a doctor or a pharmacist should be consulted.	

#### 4.9. Overdose

Well-established use	Traditional use
The major symptoms of overdose are gastric	
irritation with nausea, vomiting, colic and severe	
diarrhoea, loss of water and electrolytes.	
Treatment should be supportive with generous	
amount of fluid and correction of electrolytes. A	
specific antidote is not available.	

## 5. Pharmacological properties

#### 5.1. Pharmacodynamic properties

Well-established use	Traditional use
Pharmacotherapeutic group: contact laxatives	
Proposed ATC code: A 06 AB05	
Ricinoleic acid, the active metabolite, like other anionic surfactants, reduces net absorption of fluid and electrolytes, and stimulates intestinal peristalsis.	

#### 5.2. Pharmacokinetic properties

Well-established use	Traditional use
The absorption is inversely related to the administered dose. Small doses of castor oil (4 g) are completely absorbed while 11.4% of a dose of 10 g and 86% of a dose of 44.4 g appeared in the faeces within 24 hours.  Castor oil is hydrolysed in the small intestine by pancreatic enzymes, leading to the release of	
glycerol and ricinoleic acid.  Ricinoleic acid is then metabolised to epoxydicarboxylic acids (3,6-epoxyoctanedioic acid, 3,6-epoxydecanedioic acid and 3,6 epoxydodecanedioic acid) which are excreted via urine.	

#### 5.3. Preclinical safety data

Well-established use	Traditional use
Castor oil (2 ml daily) administered by gavage on days 18, 19 and 20 of gestation induced the	
initiation of labour and shortened the course of the delivery in pregnant rats.	
Adequate tests on genotoxicity and carcinogenicity have not been performed.	

## 6. Pharmaceutical particulars

Well-established use	Traditional use
Not applicable.	

## 7. Date of compilation/last revision

2 February 2016