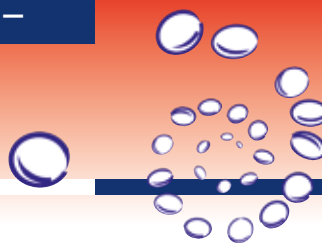


# Product Information

– for professionals only –



## Citrullin<sup>500</sup> minis



### In Short

- Citrullin<sup>500</sup> minis are Food for Special Medical Purposes (FSMP) for use in the dietary management of rare metabolic disorders, e.g. Urea Cycle Disorders, such as NAGS Deficiency, CPS Deficiency, OTC Deficiency or Argininosuccinic Aciduria or Lysinuric Protein Intolerance, when supplementation with L-Citrulline is indicated
- Citrullin<sup>500</sup> minis can also be used for the dietary management of Short Bowel Syndrome
- highly concentrated, pressed and coated L-Citrulline – in tablet form
- easy to swallow – easy application
- neutral in smell and taste
- 500 mg (2,9 mmol) L-Citrulline per tablet – 163 g tin at 250 tablets
- Cave: Citrullin<sup>500</sup> minis are not suitable for Citrullinemia

### Product Profile

Citrullin<sup>500</sup> minis are highly concentrated L-Citrulline in tablet form – pressed and coated.

Citrullin<sup>500</sup> minis allow a tasteless intake of this L-amino acid.

Due to their dosage form they offer a convenient alternative, flexible and easy to take and simple to measure out.

Citrullin<sup>500</sup> minis are not fortified with micronutrients.

### Administration

Citrullin<sup>500</sup> minis should always be taken with a sufficient quantity of liquid. They should be taken along with other food and supplementary to the regular protein supplement – if applicable.

### Intake

The tablets should be swallowed unchewed as whole tablets. They should always be taken with a sufficient quantity of liquid. The tablets are not intended to be dissolved in water or other drinks prior to intake and they are not meant to dissolve in the mouth. We recommend to take the tablets in an upright position. The box must be closed tightly after use, also with the inner lid.

Note: The tablets are covered with a tasteless coating. This makes it easy to swallow them. However the layer is very thin. Thus, if the tablets were kept in the mouth for too long, this layer would dissolve and release the typical taste of an amino acid. This is why we recommend the administration above.

**Function** Citrullin<sup>500</sup> minis are suitable for prevention or correction of disease related L-Citrulline deficiencies.

**Indication** Citrullin<sup>500</sup> minis are used supplementary in the dietary management of inborn Urea Cycle Disorders in order to allow an adequate formation of Argininosuccinate respectively Urea and thus the excretion of Ammonia (excess Nitrogen) for prevention of Hyperammonemias. Cave: With the exception of Citrullinemia!

Citrullin<sup>500</sup> minis can also be used supplementary in the dietary management of insufficient endogenous production of this amino acid, e.g. in Short Bowel Syndrome, for maintenance of Urea Cycle function (elimination of Ammonia, prevention of Hyperammonemia). It can also be given as a substitute in the dietary management of Lysinuric Protein Intolerance, to counteract the massive renal losses of Ornithine and Arginine.

**Dosage** The daily dosage depends on age, body weight and individual medical condition, and is, just as the right time for the daily intake, determined under medical supervision.

Citrullin<sup>500</sup> minis can easily be combined with the products of the plus8-system.

**Important Notice** Must only be used under medical supervision. Not for use as a sole source of nutrition. For enteral use only. Only for people with

rare metabolic disorders, e.g. Urea Cycle Disorders. Not suitable for Citrullinemia. Citrullin<sup>500</sup> minis are not suitable for infants in the first year of life.

### References:

- Mizutani et al. (1984) Oral Administration of Arginine and Citrulline in the Treatment of Lysinuric Protein Intolerance; The Tohoku Journal of experimental Medicine 142(1):15-24. doi: 10.1620/tjem.142.15.
- Osowska et al. (2004) Citrulline increases arginine pools and restores nitrogen balance after massive intestinal resection; Gut 53(12):1781-6. doi: 10.1136/gut.2004.042317.
- Osowska et al. (2008) Impairment of arginine metabolism in rats after massive intestinal resection: effect of parenteral nutrition supplemented with citrulline compared with arginine; Clinical Science 115(5):159-66. doi: 10.1042/CS20070451.
- Saudubray et al. (2011) Inborn Metabolic Diseases – Diagnosis and Treatment: Disorders of the Urea Cycle and Related Enzymes; Springer 5. Edition, Chapter 20.
- Singh (2007) Nutritional management of patients with urea cycle disorders; Journal of Inherited Metabolic Disease 30(6):880-7. doi: 10.1007/s10545-007-0718-4.
- van Vliet et al. (2014) Single amino acid supplementation in aminoacidopathies: a systematic review; Orphanet Journal of Rare Diseases 9:7. doi: 10.1186/1750-1172-9-7.

**NUTRITION INFORMATION**Citrullin<sup>500</sup> minis

100 g

0,65 g  
(1 tablet)

<b>Energy</b>			
	kJ	167	1
	kcal	42	0,27
<b>Fat</b>	g	1	<0,1
of which saturates	g	1	<0,1
<b>Carbohydrate</b>	g	0	0
of which sugars	g	0	0
<b>Fibre</b>	g	17	0,1
<b>Protein eqv.</b>	g	0	0
<b>Salt</b>	g	0	0

**Amino acids**

<b>L-Citrulline</b>	g	80	0,5
	mmol		2,9

**INGREDIENTS**

L-citrulline, bulking agents: microcrystalline cellulose & silicium dioxide, anti-caking agents: calcium silicate & magnesium stearate & magnesium carbonate & calcium phosphate, glazing agents: E 464 & E 463.

<b>Delivery Unit</b>	tin 250 tablets = 163 g	tin 9 x 250 tablets = 1467 g
<b>Article Number</b>	xx-001-31790	xx-001-31792
<b>Delivery to</b>	Pharmacies, clinics	
<b>Storage</b>	Store in a cool, dry place.	