

Mucosol

150225008014

Capsules / Adult Syrup / Pediatric Syrup Mucolytic

COMPOSITION:

Active Ingredient: Carbocisteine
Capsules: each one Capsule contains 375 mg
Adult Syrup: each 5 ml contains 250 mg
Pediatric Syrup: each 5 ml contains 125 mg

Excipients:

Capsules: maize starch, povidone K30, talc powder, magnesium stearate, capsule shell: gelatin, titanium dioxide, brilliant blue, carmoisine, quinoline, sunset yellow.
Adult Syrup: methyl paraben, propyl paraben, sucrose, glycerin, sorbitol 70% solution, caramel colour, strawberry liquid, sodium hydroxide, purified water.

Pediatric Syrup: methyl paraben, propyl paraben, sucrose, glycerin, sorbitol 70% solution, caramel color, tutti frutti flavour, sodiumhydroxide, purified water.

"This product is free from alcohol"

THERAPEUTIC INDICATIONS

Carbocisteine is a mucolytic agent for the adjunctive therapy of respiratory tract disorders characterised by excessive, viscous mucus, including chronic obstructive airways disease.

POSOLOGY AND METHOD OF ADMINISTRATION

Capsules and Adult Syrup:

Adults including the elderly:

Dosage is based upon an initial daily dosage of 2250 mg carbocisteine in divided doses, reducing to 1500 mg daily in divided doses when a satisfactory response is obtained e.g. two capsules three times a day reducing to one capsule four times a day, for normal syrup 15 ml tds, reducing to 10 ml tds

Children:

The capsule and adult syrup formulations are not recommended for children. The normal daily dosage is 20mg/kg bodyweight in divided doses. It is recommended that this is achieved with Mucosol Pediatric Syrup. Mucosol capsules and Adult Syrup are for oral administration.

Pediatric Syrup:

Children 2-5 years: 2.5 - 5 ml four times daily.

Children 5 - 12 years: 10 ml three times daily. Mucosol Pediatric Syrup is for oral administration.

CONTRAINDICATIONS

Capsules and Adult Syrup:

Hypersensitivity to the active substance or to any of the excipients.

Pediatric syrup:

Mucosol Pediatric is contraindicated for use in children less than 2 years age. Postmarketing reports of its side effects, showed that, the use of all mucolytics as carbocisteine may worsen the expected respiratory manifestations, and the side effects outweigh the benefits of its usage for children less than two years of age.

Hypersensitivity to the active substance or to any of the excipients.

SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Capsules:

Patients with rare hereditary problems of galactose intolerance, the Lapp lactose deficiency or glucose-galactose malabsorption should not take this medicine.

Adult Syrup and Pediatric syrup:

Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine.

INTERACTION WITH OTHER MEDICINAL PRODUCTS AND OTHER FORMS OF INTERACTION

None stated.

PREGNANCY AND LACTATION

Although tests in mammalian species have revealed no teratogenic effects, Mucosol is not recommended during the first trimester of pregnancy. Use in lactation:

Effects not known.

EFFECTS ON ABILITY TO DRIVE AND USE MACHINES

None stated.

UNDESIRABLE EFFECTS

Capsules, Adult Syrup and Pediatric Syrup:

Immune System Disorders: There have been reports of anaphylactic reactions and fixed drug eruption.

Skin and subcutaneous tissue disorders: There have been reports of skin rashes and allergic skin eruptions.

Capsules and Adult Syrup:

Gastrointestinal disorders: There have been rare reports of gastrointestinal bleeding occurring during treatment with Mucosol.

OVERDOSE

Gastric lavage may be beneficial, followed by observation. Gastrointestinal disturbance is the most likely symptom of Mucosol overdosage.

PHARMACOLOGICAL PROPERTIES

Pharmacodynamic properties:

Carbocisteine (S-carboxymethyl L-cysteine) has been shown in normal and bronchitic animal models to affect the nature and amount of mucus glycoprotein which is secreted by the respiratory tract. An increase in the acid:neutral glycoprotein ratio of the mucus and a transformation of serous cells to mucus cells is known to be the initial response to irritation and will normally be followed by hypersecretion. The administration of carbocisteine to animals exposed to irritants indicates that the glycoprotein that is secreted remains normal; administration after exposure indicates that return to the normal state is accelerated. Studies in humans have demonstrated that carbocisteine reduces goblet cell hyperplasia. Carbocisteine can therefore be demonstrated to have a role in the management of disorders characterised by abnormal mucus.

Pharmacokinetic properties:

Carbocisteine is rapidly absorbed from the GI tract. At steady state (7 days), Carbocisteine capsules 375mg given as 2 capsules t.d.s. To healthy volunteers gave the following pharmacokinetic parameters:

Plasma Determinations	Mean	Range
T _{max} (H)	2.0	1.0-3.0
T _{1/2} (H)	1.87	1.4-2.5
K _e (Hr)	0.387	0.28-0.50
AUC _{0-∞} (ml·min ²)	39.26	26.0-62.4
Derived Pharmacokinetic Parameters		
-CL (L/H)	20.2	-
CL (ml·min ⁻¹)	331	-
V _d (L)	105.2	-
V _d (L/kg ²)	17.75	-

*Calculated from dose for day 7 of study

SHELF LIFE

Capsules: 36 months.

Syrup: 36 months.

Pediatric Syrup: 36 months

SPECIAL PRECAUTIONS FOR STORAGE

Capsules: Store at a temperature not exceeding 30°C.

Adult Syrup: Store at a temperature not exceeding 30°C.

Pediatric Syrup: Store at a temperature not exceeding 30°C.

NATURE AND CONTENTS OF CONTAINER

Capsules: box of 20 Capsules (2 blister strips (AL/PVC) x 10 Capsules).

Adult Syrup: Carton box contains a bottle of 120 ml.

Pediatric Syrup: Carton box contains a bottle of 120 ml.

Manufactured by:

Medical Union Pharmaceuticals,

Abu-Sultan, Ismailia, Egypt.

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Adults including the elderly:

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Children:

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Pediatric Syrup:

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Children 5 - 12 years: 10 ml three times daily. Mucosol Pediatric Syrup is for oral administration.

CONTRAINDICATIONS

Capsules and Adult Syrup:

Hypersensitivity to the active substance or to any of the excipients.

Pediatric syrup:

Mucosol Pediatric is contraindicated for use in children less than 2 years age. Postmarketing reports of its side effects, showed that, the use of all mucolytics as carbocisteine may worsen the expected respiratory manifestations, and the side effects outweigh the benefits of its usage for children less than two years of age.

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INTERACTION WITH OTHER MEDICINAL PRODUCTS AND OTHER FORMS OF INTERACTION

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EFFECTS ON ABILITY TO DRIVE AND USE MACHINES

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UNDESIRABLE EFFECTS

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PHARMACOLOGICAL PROPERTIES

Pharmacodynamic properties:

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