METHOCARBAMOL TABLETS, USP, 500 MG- methocarbamol tablet, film coated

PD-Rx Pharmaceuticals, Inc.

Methocarbamol Tablets, USP, 500 mg

Rx Only

DESCRIPTION

Methocarbamol Tablets, USP, a carbamate derivative of guaifenesin, is a central nervous system (CNS) depressant with sedative and musculoskeletal relaxant properties.

The chemical name of methocarbamol is 3-(2-methoxyphenoxy)-1,2-propanediol 1-carbamate and has the empirical formula C11H15NO5. Its molecular weight is 241.24. The structural formula is shown below.

Methocarbamol is a white powder, sparingly soluble in water and chloroform, soluble in alcohol (only with heating) and propylene glycol, and insoluble in benzene and n-hexane.

Methocarbamol Tablets, USP 500 mg are available as a white, round, scored, film-coated tablet containing 500 mg of methocarbamol, USP for oral administration. The inactive ingredients present are microcrystalline cellulose, croscarmellose sodium, povidone (k-30), sodium lauryl sulfate, colloidal silicon dioxide, magnesium stearate, hypromellose, titanium dioxide, polyethylene glycol, polysorbate 80.

Methocarbamol Tablets, USP 750 mg are available as a white, capsule-shaped, film-coated tablet containing 750 mg of methocarbamol, USP for oral administration. The inactive ingredients present are microcrystalline cellulose, croscarmellose sodium, povidone (k-30), sodium lauryl sulfate, colloidal silicon dioxide, magnesium stearate, hypromellose, titanium dioxide, polyethylene glycol, polysorbate 80.

CLINICAL PHARMACOLOGY

The mechanism of action of methocarbamol in humans has not been established, but may be due to general CNS depression. It has no direct action on the contractile mechanism of striated muscle, the motor end plate or the nerve fiber.

Pharmacokinetics

In healthy volunteers, the plasma clearance of methocarbamol ranges between 0.20 and 0.80 L/h/kg, the mean plasma elimination half-life ranges between 1 and 2 hours, and the plasma protein binding ranges between 46% and 50%.

Methocarbamol is metabolized via dealkylation and hydroxylation. Conjugation of methocarbamol also is likely. Essentially all methocarbamol metabolites are eliminated in the urine. Small amounts of unchanged methocarbamol also are excreted in the urine.

Special populations

Elderly

The mean (\pm SD) elimination half-life of methocarbamol in elderly healthy volunteers (mean [\pm SD] age, 69 [\pm 4] years) was slightly prolonged compared to a younger (mean [\pm SD] age, 53.3 [\pm 8.8] years), healthy population (1.5 [\pm 0.4] hours versus 1.1 [\pm 0.27] hours, respectively). The fraction of bound methocarbamol was slightly decreased in the elderly versus younger volunteers (41% to 43% versus 46% to 50%, respectively).

Renally impaired

The clearance of methocarbamol in 8 renally-impaired patients on maintenance hemodialysis was reduced about 40% compared to 17 normal subjects, although the mean (\pm SD) elimination half- life in these two groups was similar: 1.2 (\pm 0.6) versus 1.1 (\pm 0.3) hours, respectively.

Hepatically impaired

In 8 patients with cirrhosis secondary to alcohol abuse, the mean total clearance of methocarbamol was reduced approximately 70% compared to that obtained in 8 age-and weight-matched normal subjects. The mean (\pm SD) elimination half-life in the cirrhotic patients and the normal subjects was 3.38 (\pm 1.62) hours and 1.11 (\pm 0.27) hours, respectively. The percent of methocarbamol bound to plasma proteins was decreased to approximately 40% to 45% compared to 46% to 50% in the normal subjects.

INDICATIONS AND USAGE

Methocarbamol Tablets, USP are indicated as an adjunct to rest, physical therapy, and other measures for the relief of discomfort associated with acute, painful musculoskeletal conditions. The mode of action of methocarbamol has not been clearly identified, but may be related to its sedative properties. Methocarbamol does not directly relax tense skeletal muscles in man.

CONTRAINDICATIONS

Methocarbamol Tablets, USP are contraindicated in patients hypersensitive to methocarbamol or to any of the tablet components.

WARNINGS

Since methocarbamol may possess a general CNS depressant effect, patients receiving Methocarbamol Tablets, USP should be cautioned about combined effects with alcohol and other CNS depressants.

Safe use of Methocarbamol Tablets, USP has not been established with regard to possible adverse effects upon fetal development. There have been reports of fetal and congenital abnormalities following *in utero* exposure to methocarbamol. Therefore, Methocarbamol Tablets, USP should not be used in women who are or may become pregnant and particularly during early pregnancy unless in the judgment of the physician the potential benefits outweigh the possible hazards (see **PRECAUTIONS, Pregnancy**).

Use in Activities Requiring Mental Alertness

Methocarbamol may impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Patients should be cautioned about operating machinery, including automobiles, until they are reasonably certain that methocarbamol therapy does not adversely affect their ability to engage in such activities.

PRECAUTIONS

Information for Patients

Patients should be cautioned that methocarbamol may cause drowsiness or dizziness, which may impair their ability to operate motor vehicles or machinery.

Because methocarbamol may possess a general CNS-depressant effect, patients should be cautioned about combined effects with alcohol and other CNS depressants.

Drug Interactions

See WARNINGS and PRECAUTIONS for interaction with CNS drugs and alcohol.

Methocarbamol may inhibit the effect of pyridostigmine bromide. Therefore, methocarbamol should be used with caution in patients with myasthenia gravis receiving anticholinesterase agents.

Drug/Laboratory Test Interactions

Methocarbamol may cause a color interference in certain screening tests for 5-hydroxyindoleacetic acid (5-HIAA) using nitrosonaphthol reagent and in screening tests for urinary vanillylmandelic acid (VMA) using the Gitlow method.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term studies to evaluate the carcinogenic potential of methocarbamol have not been performed. No studies have been conducted to assess the effect of methocarbamol on mutagenesis or its potential to impair fertility.

Pregnancy

Teratogenic Effects

Animal reproduction studies have not been conducted with methocarbamol. It is also not known whether methocarbamol can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Methocarbamol Tablets, USP should be given to a pregnant woman only if clearly needed.

Safe use of Methocarbamol Tablets, USP has not been established with regard to possible adverse effects upon fetal development. There have been reports of fetal and congenital abnormalities following *in utero* exposure to methocarbamol. Therefore, Methocarbamol Tablets, USP should not be used in women who are or may become pregnant and particularly during early pregnancy unless in the judgment of the physician the potential benefits outweigh the possible hazards (see **WARNINGS**).

Nursing Mothers

Methocarbamol and/or its metabolites are excreted in the milk of dogs; however, it is not known whether methocarbamol or its metabolites are excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Methocarbamol Tablets, USP are administered to a nursing woman.

Pediatric Use

Safety and effectiveness of Methocarbamol Tablets, USP in pediatric patients below the age of 16 have not been established.

ADVERSE REACTIONS

Adverse reactions reported coincident with the administration of methocarbamol include:

Body as a whole: Anaphylactic reaction, angioneurotic edema, fever, headache

Cardiovascular system: Bradycardia, flushing, hypotension, syncope, thrombophlebitis

Digestive system: Dyspepsia, jaundice (including cholestatic jaundice), nausea and vomiting

Hemic and lymphatic system:Leukopenia

Immune system: Hypersensitivity reactions

*Nervous system:*Amnesia, confusion, diplopia, dizziness or lightheadedness, drowsiness, insomnia, mild muscular incoordination, nystagmus, sedation, seizures (including grand mal), vertigo

Skin and special senses: Blurred vision, conjunctivitis, nasal congestion, metallic taste, pruritus, rash, urticaria

OVERDOSAGE

Limited information is available on the acute toxicity of methocarbamol. Overdose of methocarbamol is frequently in conjunction with alcohol or other CNS depressants and includes the following symptoms: nausea, drowsiness, blurred vision, hypotension, seizures, and coma.

In post-marketing experience, deaths have been reported with an overdose of methocarbamol alone or in the presence of other CNS depressants, alcohol or psychotropic drugs.

Treatment

Management of overdose includes symptomatic and supportive treatment. Supportive measures include maintenance of an adequate airway, monitoring urinary output and vital signs, and administration of intravenous fluids if necessary. The usefulness of hemodialysis in managing overdose is unknown.

DOSAGE AND ADMINISTRATION

Methocarbamol Tablets, USP, 500 mg - Adults:

Initial dosage: 3 tablets four times daily

Maintenance dosage: 2 tablets four times daily

Methocarbamol Tablets, USP, 750 mg - Adults:

Initial dosage: 2 tablets four times daily

Maintenance dosage: 1 tablet every 4 hours or 2 tablets three times daily

Six grams a day are recommended for the first 48 to 72 hours of treatment. (For severe conditions 8 grams a day may be administered.) Thereafter, the dosage can usually be reduced to approximately 4 grams a day.

HOW SUPPLIED

Methocarbamol Tablets, USP, 500 mg tablets are white, round, film-coated tablets, debossed "G173" on one side, plain and scored on the other side. They are supplied as follows:

Bottles of 60 NDC 72789-481-60

Bottles of 90 NDC 72789-481-90

Bottles of 100 NDC 72789-481-01

Bottles of 180 NDC 72789-481-93

Bottles of 1000 NDC 72789-481-95

Store at 20° to 25° C (68° to 77° F) [see USP Controlled Room Temperature].

PRINCIPAL DISPLAY PANEL

Methocarbamol

500 mg

Rx Only

Film-Coated Tablets

Each film-coated tablet contains:

Methocarbamol, USP ... 500 mg

Usual Dosage: See package insert for full prescribing information.

Store at 20° to 25°C (68°F to 77°F) [See USP Controlled Room Temperature].

Dispense contents in a tight container.

Prescribing information can be viewed / printed at:



500 mg





Please direct all product inquiries to PD-Rx Pharmaceuticals, Inc.

Marketed and Packaged By:

PD-Rx Pharmaceuticals, Inc Oklahoma City, OK 73127 1-405-942-3040 v.01.25.0

Manufactured by:

Granulation Technology, Inc. Fairfield, NJ 07004, USA



GTIN: 00372789481937 SNO: K22E39000002 EXP: 05/2024 LOT: K22E39

METHOCARBAMOL TABLETS, USP, 500 MG

methocarbamol tablet, film coated

Product Information

Product Type

HUMAN PRESCRIPTION

(Source)

Item Code

NDC:72789-481(NDC:63561-

0173)

Route of Administration

DRUG ORAL

Active Ingredient/Active Moiety

Ingredient Name

Basis of Strength Strength

METHOCARBAMOL (UNII: 1250D7737X) (METHOCARBAMOL - UNII:1250D7737X)

METHOCARBAMOL

500 mg

Inactive Ingredients

macano mg. calonio	
Ingredient Name	Strength
MICROCRYSTALLINE CELLULOSE (UNII: OP1R32D61U)	
CROSCARMELLOSE SODIUM (UNII: M280L1HH48)	
POVIDONE K30 (UNII: U725QWY32X)	
SODIUM LAURYL SULFATE (UNII: 368GB5141J)	
MAGNESIUM STEARATE (UNII: 70097M6I30)	
SILICON DIOXIDE (UNII: ETJ7Z6XBU4)	
TITANIUM DIOXIDE (UNII: 15FIX9V2JP)	
HYPROMELLOSE 2910 (3 MPA.S) (UNII: 0VUT3PMY82)	
HYPROMELLOSE 2910 (6 MPA.S) (UNII: 0WZ 8WG20P6)	
POLYETHYLENE GLYCOL 400 (UNII: B697894SGQ)	

POLYSORBATE 80 (UNII: 60ZP39ZG8H)

Product Characteristics			
Color	white	Score	2 pieces
Shape	ROUND	Size	13mm
Flavor		Imprint Code	G173
Contains			

Packaging				
#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:72789- 481-60	60 in 1 BOTTLE, PLASTIC; Type 0: Not a Combination Product		
2	NDC:72789- 481-90	90 in 1 BOTTLE, PLASTIC; Type 0: Not a Combination Product	01/21/2025	
3	NDC:72789- 481-01	100 in 1 BOTTLE, PLASTIC; Type 0: Not a Combination Product	01/21/2025	
4	NDC:72789- 481-93	180 in 1 BOTTLE, PLASTIC; Type 0: Not a Combination Product	01/21/2025	
5	NDC:72789- 481-95	1000 in 1 BOTTLE, PLASTIC; Type 0: Not a Combination Product	01/21/2025	

Marketing Information			
Marketing Application Number or Monograph Category Citation		Marketing Start Date	Marketing End Date
ANDA	ANDA212623	01/01/2024	

Labeler - PD-Rx Pharmaceuticals, Inc. (156893695)

Registrant - PD-Rx Pharmaceuticals, Inc. (156893695)

Establishment			
Name	Address	ID/FEI	Business Operations
PD-Rx Pharmaceuticals, Inc.		156893695	repack(72789-481)

Revised: 1/2025 PD-Rx Pharmaceuticals, Inc.