METHOCARBAMOL- methocarbamol tablets tablet, coated
Aphena Pharma Solutions - Tennessee, LLC

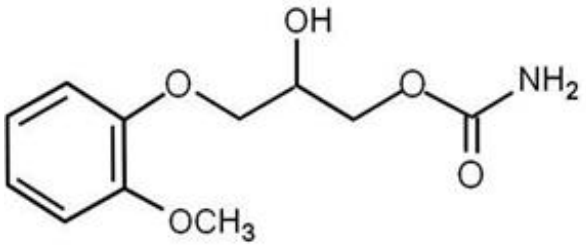
Methocarbamol Tablets

Rx Only

DESCRIPTION

Methocarbamol tablet, 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 1,2-Propanediol,3-(2-methoxyphenoxy)-,1-Carbamate,(±)-.(or) (±)-3-(o-Methoxyphenoxy)-1,2-Propanediol 1-carbamate and has the empirical formula C11H15NO5. Its molecular weight is 241.24g/mol. The structural formula is shown below.



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

Methocarbamol tablets, USP are available as 500 mg and 750 mg tablets for oral administration.

Methocarbamol tablets, USP 500 mg are light orange colored, round shaped film coated tablets debossed with "G" above the score line on one side and "500" on other side.

Methocarbamol tablets, USP 750 mg are light orange colored, caplet shaped film coated tablets debossed with "G" on one side and "750" on other side.

Methocarbamol tablets, USP 500 mg and 750 mg contain the following inactive ingredients: colloidal silicon dioxide, maize starch, povidone, sodium lauryl sulfate, sodium starch glycolate, and stearic acid.

The tabets are coated with Aquarius Prime which contains FD&C yellow 6, hydroxypropylcellulose, hypromellose, polysorbate 80, propylene glycol, and titanium dioxide

CLINICAL PHARMACOLOGY

The mechanism of action of methocarbamol in humans has not been established, but may be due to general central nervous system (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 (± SD) elimination half-life of methocarbamol in elderly healthy volunteers (mean (± SD) age, 69 (± 4) years) was slightly prolonged compared to a younger (mean (± SD) age, 53.3 (± 8.8) years), healthy population (1.5 (± 0.4) hours versus 1.1 (± 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 (± SD) elimination half-life in these two groups was similar: 1.2 (± 0.6) versus 1.1 (±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 (± SD) elimination half-life in the cirrhotic patients and the normal subjects was 3.38 (± 1.62) hours and 1.11 (± 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 & 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 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 should be cautioned about combined effects with alcohol and other CNS depressants.

Safe use of Methocarbamol tablets 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 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 & OR LABORATORY TEST INTERACTIONS

Methocarbamol may cause 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

Pregnancy Category C

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 should be given to a pregnant woman only if clearly needed.

Safe use of methocarbamol tablet 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 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 are administered to a nursing woman.

PEDIATRIC USE

Safety and effectiveness of methocarbamol tablets 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

To report SUSPECTED ADVERSE REACTIONS, contact Granules USA, Inc. at 1-877-770-3183 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch

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 & ADMINISTRATION

Methocarbamol Tablets, USP 500 mg – Adults:
Initial dosage: 3 tablets 4 times daily
Maintenance dosage: 2 tablets 4 times daily
Methocarbamol Tablets, USP 750 mg – Adults:
Initial dosage: 2 tablets 4 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 are light orange colored, roundshaped film coated tablets debossed with "G" above the score line onone side and "500" on other side.

They are supplied as follows

Bottles of 24 tablets NDC 62207-754-41

Bottles of 100 tablets NDC 62207-754-43

Bottles of 500 tablets NDC 62207-754-47

Bottles of 1000 tablets NDC 62207-754-49

Methocarbamol tablets, USP 750 mg are light orange colored, capletshaped film coated tablets debossed with "G" on one side and"750" on other side.

Bottles of 24 tablets NDC 62207-770-41

Bottles of 100 tablets NDC 62207-770-43

Bottles of 500 tablets NDC 62207-770-47

Bottles of 1000 tablets NDC 62207-770-49

Store between 20°C and 25°C (68°F and 77° F)

[see USP Controlled Room Temperature].

Dispense in tight container.

Manufactured for:

Granules USA, Inc.

Parsippany, NJ 07054

Toll-free: 1-877-770-3183

Manufactured by:

Granules India Limited

Hyderabad-500 081

Made in India

Issued: January 2017

Repackaging Information

Please reference the ***How Supplied*** section listed above for a description of individual tablets. This drug product has been received by Aphena Pharma - TN in a manufacturer or distributor packaged configuration and repackaged in full compliance with all applicable cGMP regulations. The package configurations available from Aphena are listed below:

Count	750 mg
60	71610-134-53
90	71610-134-60

Store between 20°-25°C (68°-77°F). See USP Controlled Room Temperature. Dispense in a tight light-resistant container as defined by USP. Keep this and all drugs out of the reach of children.

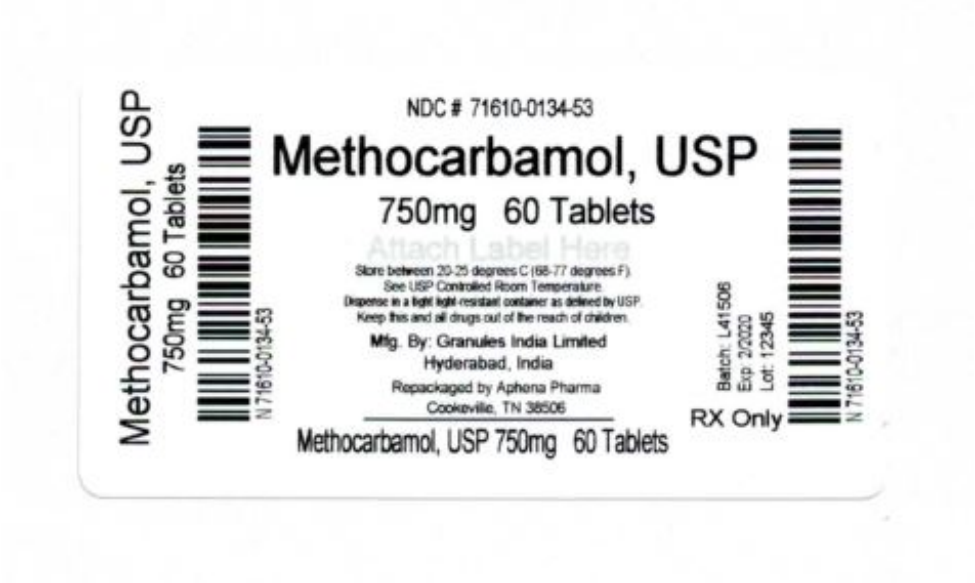
Repackaged by:

Cookeville, TN 38506

20180912JH

PRINCIPAL DISPLAY PANEL - 750 mg

NDC 71610-134 - Methocarbamol, USP 750 mg - Rx Only



METHOCARBAMOL

methocarbamol tablets tablet, coated

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	**Item Code (Source)**	NDC:71610-134(NDC:70010-770)
Route of Administration	ORAL		

Active Ingredient/Active Moiety		
Ingredient Name	**Basis of Strength**	**Strength**
METHOCARBAMOL (UNII: 125OD7737X) (METHOCARBAMOL - UNII:125OD7737X)	METHOCARBAMOL	750 mg

Inactive Ingredients	
Ingredient Name	**Strength**
SILICON DIOXIDE (UNII: ETJ7Z6XBU4)	
STARCH, CORN (UNII: O8232NY3SJ)	
POVIDONE (UNII: FZ989GH94E)	
SODIUM LAURYL SULFATE (UNII: 368GB5141J)	
SODIUM STARCH GLYCOLATE TYPE A POTATO (UNII: 5856J3G2A2)	

STEARIC ACID (UNII: 4ELV7Z65AP)	
FD&C YELLOW NO. 6 (UNII: H77VEI93A8)	
HYDROXYPROPYL CELLULOSE (UNII: RFW2ET671P)	
HYPROMELLOSE 2910 (6 MPA.S) (UNII: 0WZ8WG20P6)	
POLYSORBATE 80 (UNII: 6OZP39ZG8H)	
PROPYLENE GLYCOL (UNII: 6DC9Q167V3)	
TITANIUM DIOXIDE (UNII: 15FIX9V2JP)	

Product Characteristics

Color	orange	**Score**	no score
Shape	CAPSULE	**Size**	19mm
Flavor		**Imprint Code**	G;750
Contains			

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:71610-134-53	60 in 1 BOTTLE; Type 0: Not a Combination Product	08/27/2018	
2	NDC:71610-134-60	90 in 1 BOTTLE; Type 0: Not a Combination Product	08/27/2018	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA209312	07/02/2018	

Labeler - Aphena Pharma Solutions - Tennessee, LLC (128385585)

Establishment

Name	Address	ID/FEI	Business Operations
Aphena Pharma Solutions - Tennessee, LLC		128385585	REPACK(71610-134)

Revised: 9/2018 Aphena Pharma Solutions - Tennessee, LLC