#### METHOCARBAMOL- methocarbamol tablet, film coated Carilion Materials Management

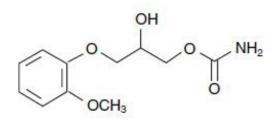
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#### Methocarbamol tablet, film coated 500 mg and 750 mg

#### DESCRIPTION

Methocarbamol Tablets USP, 500 mg and 750 mg, a carbamate derivative of guaifenesin, is a central nervous system (CNS) depressant with sedative and musculoskeletal relaxant properties.

The chemical name of methocar-bamol is 3-(2-methoxyphenoxy)-1, 2-propanediol 1-carbamate and has the empirical formula C H NO . Its molecular weight is 241.24. The structural formula is shown below. 11155



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 -hexane. *n* 

Methocarbamol tablet, 500 mg is available as an orange, film coated, round convex tablet containing 500 mg of methocarbamol, USP for oral administration. The inactive ingredients present are microcrystalline cellulose, croscarmellose sodium, FD&C Yellow 6 aluminum lake, hydroxypropyl cellulose, hypromellose, magnesium stearate, polyethylene glycol, triacetin, titanium dioxide.

Methocarbamol tablet, 750 mg is available as a yellow, film coated, modified capsule shaped tablet containing 750 mg of methocarbamol, USP for oral administration. The inactive ingredients present are microcrystalline cellulose, croscarmellose sodium, iron oxide yellow, iron oxide red, hydroxypropyl cellulose, hypromellose, magnesium stearate, polyethylene glycol, triacetin, 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 ( $\pm$  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 is 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 is 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 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 and for interaction with CNS drugs and alcohol. WARNINGSPRECAUTIONS

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

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

Safe use of methocarbamol 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 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 is administered to a nursing woman.

### Pediatric Use

Safety and effectiveness of methocarbamol in pediatric patients below the age of 16 have not been established.

### **ADVERSE REACTIONS**

Adverse reactions reported coincident with the administration of methocarbamol include:

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

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

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

Leukopenia *Hemic and lymphatic system:* 

Hypersensitivity reactions Immune system:

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

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

# 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, 500 mg – Adults:

Initial dosage: 3 tablets q.i.d.

Maintenance dosage: 2 tablets q.i.d.

Methocarbamol, 750 mg – Adults:

Initial dosage: 2 tablets q.i.d.

Maintenance dosage: 1 tablet q.4h. or 2 tablets t.i.d.

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

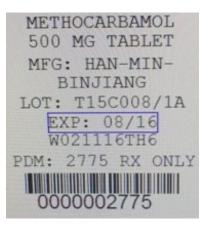
Product: 68151-2775 NDC: 68151-2775-7 1 TABLET, FILM COATED in a BOTTLE LBL112 REV082713 Revised: August 2013

Manufactured for: AustarPharma LLC 18 Mayfield Ave, Edison, NJ 08837, USA

By Hangzhou Minsheng Binjiang Pharmaceutical Co., Ltd. Hangzhou, 310051, China

Distributed by: Virtus Pharmaceuticals LLC 2649 Causeway Center Dr. Tampa, FL 33619, USA 1-813-283-1344

#### METHOCARBAMOL TABLET, FILM COATED



nethocarbamol tablet, film coated				
Product Information				
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:68151-2775(ND0	C:76439-134)
Route of Administration	ORAL			
Active Ingredient/Active Moi	ety			
Iı	Ingredient Name Basis of			
METHO CARBAMOL (UNII: 1250D773	7X) (METHOCARBAMOL - UNII:1	250D7737X)	METHOCARBAMOL	500 mg
Inactive Ingredients	To see Prove Norma			trength
Ingredient Name				
CELLULOSE, MICROCRYSTALLINE CROSCARMELLOSE SODIUM (UNII:	, ,			
FD&C YELLOW NO. 6 (UNII: H77VEIS				
HYDROXYPROPYL CELLULOSE (T				
HYPROMELLOSES (UNII: 3NXW29V3				
HYPROMELLOSES (UNII: 3NXW29V3 MAGNESIUM STEARATE (UNII: 7009				
	7M6I30)			
MAGNESIUM STEARATE (UNII: 7009	7M6I30)			
MAGNESIUM STEARATE (UNII: 7009 POLYETHYLENE GLYCOLS (UNII: 3	7M6I30) WJQ0SDW1A)			
MAGNESIUM STEARATE (UNII: 7009 POLYETHYLENE GLYCOLS (UNII: 3 TRIACETIN (UNII: XHX3C3X673)	7M6I30) WJQ0SDW1A)			
MAGNESIUM STEARATE (UNII: 7009 POLYETHYLENE GLYCOLS (UNII: 3 TRIACETIN (UNII: XHX3C3X673)	7M6I30) WJQ0SDW1A)			

Color	ORANGE	Score		2 pieces			
Shape	ROUND	Size		13mm			
Flavor		Imprint Code		AP212			
Contains							
Packaging							
# Item Code	Package Descript	on Marketing Start Date		Marketing End Date			
<b>1</b> NDC:68151-2775-7	l in 1 BOTTLE; Type 0: Not a Comb	ination Product	12/15/2013				
Marketing Information							
Marketing Category	Application Number or Mon	ograph Citation	Marketing Start Date	Marketing End Date			
ANDA	ANDA200958		12/15/2013				

Labeler - Carilion Materials Management (079239644)

Establishment								
Name	Address	ID/FEI	Business Operations					
Carilion Materials Management		079239644	REPACK(68151-2775)					

Revised: 12/2017

Carilion Materials Management