1.3 Product information

1.3.1 Summary of Product Characteristics (SmPC)

Enclosed

SUMMARY OF PRODUCT CHARACTERISTICS

1. Name of the medicinal product

1.1 Product Name : METHOCARBAMOL AND PARACETAMOL TABLETS

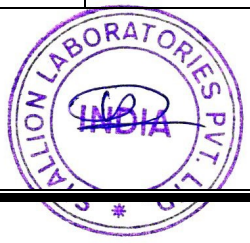
1.2 Strength:

Each uncoated bilayered tablet contains:

Methocarbamol USP	400 mg
Paracetamol BP	500 mg
Excipients	Q.S.
Color: Erythrosine	

2. Qualitative and Quantitative Composition

Sr. No.	Ingredients	Label Claim (mg)	Actual Qty/Tablet (mg)	Functions
Dry mixing-I				
1	Methocarbamol USP*	400.00	400.00	Muscle Relaxant
2.	Maize Starch BP **	---	13.000	Diluent
3.	Hydroxy Propyl Cellulose (LH-11) BP	---	3.000	Matrixing Agent
4.	Sodium Lauryl Sulphate BP	---	4.000	Surfactant
5.	Sodium Starch Glycolate BP	---	8.000	Disintegrant
Dry mixing-II				
6.	Paracetamol BP*	500.00	500.00	Analgesic and Antipyretic
7.	Sodium Starch Glycolate BP	---	6.000	Disintegrant
Binding-I				
8.	Povidone (K-30) BP	---	5.000	Binder
9.	Purified Water BP ***	---	0.130 ml	Solvent
Binding-II				
10.	Povidone (K-30) BP	---	5.000	Binder
11.	Maize Starch BP	---	18.000	Binder
12.	Purified Water BP***	---	0.150 ml	Solvent
13.	Color Supra Erythrosine IHS	---	0.120	Colorant
Lubrication-I				
14.	Sodium Starch Glycolate BP	---	8.000	Disintegrant
15.	Magnesium Stearate BP	---	5.000	Lubricant
16.	Sodium Lauryl Sulphate BP	---	5.000	Surfactant
17.	Croscarmellose Sodium BP	---	9.000	Disintegrant
Lubrication-II				
19.	Sodium Starch Glycolate BP	---	5.000	Disintegrant
20.	Croscarmellose Sodium BP	---	5.000	Disintegrant
21.	Sodium Lauryl Sulphate BP	---	5.400	Surfactant
22.	Magnesium Stearate BP	---	5.500	Lubricant
Total Weight of Uncoated Tablets			**1010.020 mg**	



*Quantity to be calculated on the basis of its potency
** Quantity to be compensates on increasing quantity of active material.
*** The materials that will not remain in the final product.

3. Pharmaceutical Forms

White and Pink coloured, Oblong shaped, biconvex, uncoated bilayered tablet having break line on one side and plain on other side.

4. Clinical Particulars

4.1 Therapeutic Indications

As a short-term adjunct to the symptomatic treatment of acute musculoskeletal disorders associated with painful muscle spasms.

Paracetamol has analgesic and antipyretic actions similar to those of aspirin and hence is a suitable alternative for patients sensitive to aspirin.

4.2 Posology and Method of administration

Route of Administration: Oral Bilayer Uncoated Tablet

Adults:
The usual dose is 2 tablets four times daily but therapeutic response has been achieved with doses as low as 1 tablet three times daily.

Elderly:
Half the maximum dose or less may be sufficient to produce a therapeutic response.

Children: Not recommended.

Adults including elderly and children over 12 years: One to two tablets every 4-6 hours as required, to a maximum of 8 tablets daily in divided doses.

Children 6-12 years*:*
Half to one tablet every 4-6 hours as necessary, to a maximum of 4 tablets daily in divided doses.

Children under 6 years:
Not recommended for children under 6 years of age. Alternative presentations of paracetamol are recommended for paediatric usage in order to obtain suitable doses of less than 250mg.

4.3 Contraindications

Hypersensitivity to methocarbamol or any of the other excipients. Coma or pre-coma states. Known brain damage or epilepsy. Myasthenia gravis.

Known hypersensitivity to paracetamol or other constituents in the tablets.

4.4 Special warning and precaution for use

Caution needed for patients with history of heart, liver or kidney disease, mental illness, electrolyte imbalance, any allergy, who are taking other medications, during pregnancy and breastfeeding. Avoid concomitant use of drugs known to prolong QT interval. It may

cause dizziness, do not drive a car or operate machinery while taking this medication. Do not eat grapefruit or drink grapefruit juice while taking this medication.

4.5 Interaction with other medicinal products and other forms of interactions

Methocarbamol

It may potentiate the effects of other central nervous system depressants and stimulants including alcohol, barbiturates, anaesthetics and appetite suppressants. The effects of anticholinergics, e.g. atropine and some psychotropic drugs may be potentiated by methocarbamol. Methocarbamol may inhibit the effect of pyridostigmine bromide. Therefore methocarbamol should be used with caution in patients with myasthenia gravis receiving anticholinesterase agents.

Paracetamol

Anticoagulants - the effect of warfarin and other coumarins may be enhanced by prolonged regular use of paracetamol with increased risk of bleeding. Occasional doses have no significant effect.Metoclopramide & Domperidone may increase speed of absorption of paracetamol. Colestyramine reduce absorption if given within one hour of paracetamol.

4.6 Fertility, pregnancy and lactation

Animal reproductive studies have not been conducted with methocarbamol. Safe use of methocarbamol has not been established with regard to possible adverse effects upon foetal development. There have been very rare reports of foetal 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 judgement of the physician the potential benefits outweigh the possible hazards.

Epidemiological studies in human pregnancy have shown no effects due to paracetamol used in the recommended dosage. However, paracetamol should be avoided in pregnancy unless considered essential by the physician.

4.7 Effects on ability to drive and use machines

If you experience drowsiness, dizziness, hypotension or a headache as side-effects when using Methocarbamol and Paracetamol Tablet medicine then it may not be safe to drive a vehicle or operate heavy machinery. One should not drive a vehicle if using the medicine makes you drowsy, dizzy or lowers your blood-pressure extensively. Pharmacists also advise patients not to drink alcohol with medicines as alcohol intensifies drowsiness side-effects. Please check for these effects on your body when using Methocarbamol and Paracetamol Tablet. Always consult with your doctor for recommendations specific to your body and health conditions.

4.8 Undesirable effects

Adverse reactions reported coincident with the administration of methocarbamol include Angioneurotic oedema, anaphylactic reaction, fever, headache, Bradycardia, flushing, hypotension, syncope, Dyspepsia, jaundice , nausea and vomiting, Leucopenia, Restlessness, anxiety, tremor, amnesia, confusion, diplopia, dizziness or light-headedness, vertigo, drowsiness, insomnia, mild muscular incoordination, nystagmus, seizures Blurred vision, conjunctivitis with nasal congestion, metallic taste, pruritus, rash, urticaria.

Adverse effects of Paracetamol are rare but hypersensitivity including skin rash may occur. There have been reports of blood dyscrasias including thrombocytopenia, neutropenia, pancytopenia, leukopenia and agranulocytosis but these were not necessarily causality related to Paracetamol.

4.9 Overdose

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.

Symptoms of Paracetamol overdosage in the first 24 hours are pallor, nausea, vomiting, anorexia and abdominal pain. Liver damage may become apparent 12 to 48 hours after ingestion. Abnormalities of glucose metabolism and metabolic acidosis may occur. In severe poisioning, hepatic failure may progress to encephalopathy, haemorrhage, hypoglycaemia, cerebral oedema, and death. Acute renal failure with acute tubular necrosis.

Management of overdose of methocarbamol 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 haemodialysis in managing overdose is unknown.

Immediate treatment is essential in the management of paracetamol overdose. Treatment with activated charcoal should be considered if the overdose has been taken within 1 hour.

5. Pharmacological properties

5.1 Pharmacodynamic Properties

Methocarbamol

Pharmacotherapeutic group: Muscle relaxants, centrally acting agents; Carbamic acid esters, ATC code: M03BA03.

Robaxin-750 is used as a short-term adjunct to the symptomatic treatment of acute musculoskeletal disorders associated with painful muscle spasms.

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

Paracetamol

Analgesic – the mechanism of analgesic action has not been fully determined. Paracetamol may act predominantly by inhibiting prostaglandin synthesis in the central nervous system (CNS) and to a lesser extent, through a peripheral action by blocking pain-impulse generation.

The peripheral action may also be due to inhibition of prostaglandin synthesis or to inhibition of the synthesis or actions of other substances that sensitise pain receptors to mechanical or chemical stimulation.

Antipyretic – paracetamol probably produces antipyresis by acting centrally on the

hypothalamic heat-regulation centre to produce peripheral vasodilation resulting in increased blood flow through the skin, sweating and heat loss. The central action probably involves inhibition of prostaglandin synthesis in the hypothalamus.

5.2 Pharmacokinetic Properties

Methocarbamol
Methocarbamol is absorbed from the gastro-intestinal tract and produces peak plasma concentrations after about 1-3 hours. Its activity derives from the intact molecule and only a small proportion is converted to guaiphenesin.

Renally impaired
The clearance of methocarbamol in renally-impaired patients on maintenance haemodialysis was reduced about 40% compared to a normal population, although the mean elimination half-life in these two groups was similar (1.2 versus 1.1 hours, respectively).

Hepatically impaired
In patients with cirrhosis secondary to alcohol abuse, the mean total clearance of methocarbamol was reduced approximately 70% compared to a normal population (11.9 L/hr), and the mean elimination half-life was extended to approximately 3.4 hours. The fraction of methocarbamol bound to plasma proteins was decreased to approximately 40 to 45% compared to 46 to 50% in an age- and weight-matched normal population.

Paracetamol
Absorption and Fate
Paracetamol is readily absorbed from the gastro-intestinal tract with peak plasma concentrations occurring about 30 minutes to 2 hours after ingestion. It is metabolised in the liver and excreted in the urine mainly as the glucuronide and sulfate conjugates. Less than 5% is excreted as unchanged paracetamol. The elimination half-life varies from about 1 to 4 hours. Plasma-protein binding is negligible at usual therapeutic concentrations but increases with increasing concentrations.

A minor hydroxylated metabolite which is usually produced in very small amounts by mixed-function oxidases in the liver and which is usually detoxified by conjugation with liver glutathione may accumulate following paracetamol overdosage and cause liver damage.

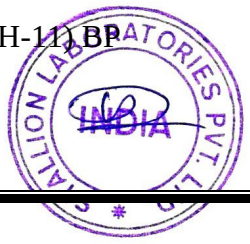
5.3 Preclinical Safety data

Methocarbamol
No information is available.

Paracetamol
Conventional studies using the currently accepted standards for the evaluation of toxicity to reproduction and development are not available**.**

6. Pharmaceutical Particulars

6.1 List of Excipients
Maize Starch BP
Hydroxy Propyl Cellulose (LH-11) BP



Sodium Lauryl Sulphate BP
Sodium Starch Glycolate BP
Povidone (K-30) BP
Purified Water BP
Color Supra Erythrosine IH
Magnesium Stearate BP
Croscarmellose Sodium BP

6.2 Incompatibilities
None

6.3 Shelf Life
36 months from the date of manufacturing

6.4 Special precautions for storage
Store at a temperature not exceeding 25ºC in a dry place. Protect from light. Keep out of reach of children.

6.5 Nature and contents of container
1 X 10 Tablets in Alu-PVC Blister Pack

7. Marketing authorisation holder

STALLION LABORATORIES PVT. LTD.
Address: C-1B, 305/2, 3, 4& 5, G.I.D.C.
Kerala (Bavla), Dist.: Ahmedabad, Gujarat, India.
Phone: (02714)-268315, 268386
Fax: (02714)-268769
E-mail: info@stallionlabs.com

8. Marketing authorisation number(s)
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9. Date of first authorisation/renewal of the authorization
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10. Date of revision of the text

1.3.2 Labelling

Inner label

Enclosed separately

Outer label

Enclosed separately

1.3.3 Package Insert

Enclosed separately