## SUMMARY OF PRODUCT CHARACTERISTICS (SPC)

# **1. NAME OF THE MEDICINAL PRODUCT**

## PAWAFENAC

## (DICLOFENAC POTASSIUM TABLETS 50

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Sr. No.	Ingredients	Spec	Qty/ Tab	Ovg.
			(mg)	(%)
1.	Diclofenac Potassium	BP	50.00	
2.	*Maize Starch	BP	319.35	
3.	Dicalcium Phosphate	BP	181.00	
4	*Maize Starch (P)	BP	25.00	
5	Microcrystalline Cellulose	BP	136.00	
6	Methyl Paraben	BP	1.50	
7	Propyl Paraben	BP	0.15	
LUBRICAN	ITS			
9	Purified Talc	BP	10.00	
10	Colloidal Silicon Dioxide	BP	5.00	
11	Magnesium Stearate	BP	7.00	
12	Sodium starch glycolate	BP	15.00	
13	*Maize Starch (Additional)	BP	32.64	
	TOTAL		750 mg	
FILM COA	TING			
14	Readycoat AMB Green colour	IH	14.50	

15	Purified Talc	BP	2.50	
16	Purified water	IH	QS	
	TOTAL		767.00 mg	

\* Additional Maize starch is added to compensate the loss on drying.BP: British PharmacopoeiaIH: In-House Specification

Average Weight of Uncoated tablet: 750 mg  $\pm$  5% Average weight of film-coated tablet: 757 mg  $\pm$  5%

### **3. PHARMACEUTICAL FORM**

Tablet

## 4. CLINICAL PARTICULARS

### 4.1 Therapeutic Indications

In the management of chronic conditions, such as rheumatoid arthritis, osteoarthritis, and ankylosing spondylitis

# 4.2 Posology and Method of Administration

Route of administration: Oral

Adults: One tablet daily, taken whole with liquid, to be taken preferably with or after food. The recommended maximum daily dose is 150 mg.

**Elderly:** Non-steroidal anti-inflammatory drugs should be used with caution in older patients who generally are more prone to adverse reactions. Elderly patients are to be treated with the lowest effective dose. If necessary, a lower strength formulation is to be prescribed.

Children: Not recommended for use in children.

4.3 Contraindications

i) Known hypersensitivity to the active substance or any of the excipients

ii) Active gastric or intestinal ulcer, bleeding or perforation

iii) History of gastrointestinal bleeding or perforation, relating to previous NSAID therapy. Active, or history of recurrent peptic ulcer/ haemorrhage

iv) Last trimester of pregnancy

v) Severe hepatic, renal or cardiac failure

vi) Established congestive heart failure, ischemic heart disease, peripheral arterial disease and/or cerebrovascular disease.

vii) Contraindicated in patients in whom attacks of asthma, urticaria, or acute rhinitis are precipitated by acetylsalicylic acid or other NSAIDs

## 4.4 Special Warnings and Precautions for use

### General:

i) The concomitant use with systemic NSAIDs including cyclooxygenase-2 selective inhibitors should be avoided due to the absence of any evidence demonstrating synergistic benefits and the potential for additive undesirable effects.

ii) As with other NSAIDs, allergic reactions, including anaphylactic reactions, can also occur in rare cases with diclofenac without earlier exposure to the drug.

### **Gastro-intestinal effects:**

Gastrointestinal bleeding ulceration or perforation which can be fatal has been reported with all NSAIDs including diclofenac and may occur at any time during treatment, with or without warning symptoms or a previous history of serious gastrointestinal events.

### **Hepatic effects:**

Close medical surveillance is required when prescribing Diclofenac to patients with impaired hepatic function, as their condition may be exacerbated.

### **Renal effects:**

Monitoring of renal function is recommended as a precautionary measure when using Diclofenac in such cases. Discontinuation of therapy is usually followed by recovery to the pre-treatment state.

### Skin effects:

Serious skin reactions, some of them fatal, including exfoliative dermatitis, Stevens-Johnson syndrome and toxic epidermal necrolysis, have been reported very rarely in association with the use of NSAIDs.

#### Cardiovascular and cerebrovascular effects:

As the cardiovascular risks of diclofenac may increase with dose and duration of exposure, the shortest duration possible and the lowest effective daily dose should be used.

### Haematological effect:

During prolonged treatment with Diclofenac, as with other NSAIDs, monitoring of the blood count is recommended. Like other NSAIDs, Diclofenac may temporarily inhibit platelet aggregation.

#### **Female fertility**

The use of diclofenac may impair female fertility and is not recommended in women attempting to conceive. In women who have difficulties conceiving or who are undergoing investigation of infertility, withdrawal of diclofenac should be considered.

## 4.5 Interaction with other medicinal products and other forms of interaction

The following interactions include those observed with Diclofenac gastro-resistant tablets and/or other pharmaceutical forms of diclofenac.

**Lithium:** If used concomitantly, diclofenac may raise plasma concentrations of lithium. Monitoring of the serum lithium level is recommended.

**Digoxin:** If used concomitantly, diclofenac may raise plasma concentrations of digoxin. Monitoring of the serum digoxin level is recommended.

**Other NSAIDs and corticosteroids**: Concomitant administration of diclofenac and other systemic NSAIDs or corticosteroids may increase the frequency of gastrointestinal undesirable effects.

**Diuretics and antihypertensive agents**: Like other NSAIDs use of Diclofenac prolonged release tablets with diuretics or antihypertensive agents (e.g. beta-blockers, angiotensin converting enzyme (ACE) inhibitors) may cause a decrease in their antihypertensive effect via inhibition of vasodilatory prostaglandin synthesis. Therefore, the combination should be administered with caution and patients, especially the elderly, should have their blood pressure periodically monitored.

Antidiabetics: Clinical studies have shown that Econac can be given together with oral antidiabetic agents without influencing their clinical effect.

**Quinolone antibacterials**: There have been isolated reports of convulsions which may have been due to concomitant use of quinolones and NSAIDs.

**Phenytoin:** When using phenytoin concomitantly with diclofenac, monitoring of phenytoin plasma concentrations is recommended due to an expected increase in exposure to phenytoin.

**Cardiac glycosides:** Concomitant use of cardiac glycosides and NSAIDs in patients may exacerbate cardiac failure, reduce GFR and increase plasma glycoside levels.

#### 4.6 Pregnancy and Lactation

Consequently, Diclofenac Sodium is contraindicated during the third trimester of pregnancy.

### Lactation

Like other NSAIDs, diclofenac passes into the breast milk in small amounts. Therefore, Diclofenac should not be administered during breast feeding in order to avoid undesirable effects in the infant.

### Fertility

As with other NSAIDs, the use of Diclofenac may impair female fertility and is not recommended in women attempting to conceive. In women who have difficulties conceiving or who are undergoing investigation of infertility, withdrawal of Diclofenac should be considered.

### 4.7 Effects on ability to drive and use machines

Patients experiencing visual disturbances, dizziness, vertigo, somnolence, central nervous system disturbances drowsiness or fatigue while taking Diclofenac, should refrain from driving or using machines.

#### 4.8 Undesirable Effects

Adverse reactions are ranked using the following convention: very common: (>1/10); common ( $\geq$ 1/100, <1/10); uncommon ( $\geq$ 1/1,000, <1/100); rare ( $\geq$ 1/10,000, <1/1,000); very rare (<1/10,000)

## Blood and lymphatic system disorders

Very rare : Thrombocytopenia, leukopenia, anaemia

## Immune system disorders

Rare : Hypersensitivity, anaphylactic and anaphylactoid reactions

Very rare : Angioneurotic oedema

### **Psychiatric disorders**

Very rare : Disorientation, depression, insomnia, nightmare, irritability, psychotic disorder

## Nervous system disorders

Common : Headache, dizziness

Rare : Somnolence, tiredness

Very rare : Paraesthesia, memory impairment, convulsion, anxiety, tremor, aseptic meningitis, taste disturbances, cerebrovascular accident

### Eye disorders

Very rare : Visual disturbance, vision blurred, diplopia

## Ear and labyrinth disorders

Common : Vertigo

Very rare : Tinnitus, hearing impaired

### **Cardiac disorders**

Very rare : Palpitations, chest pain, cardiac failure, myocardial infarction

### Vascular disorders

Very rare : Hypertension, hypotension, vasculitis

### **Respiratory, thoracic and mediastinal disorders**

Rare : Asthma

Very rare : Pneumonitis

### Gastrointestinal disorders

Common : Nausea, vomiting, diarrhoea, dyspepsia, abdominal pain, flatulence, anorexia

Rare : Gastritis, gastrointestinal haemorrhage, haematemesis

## Skin and subcutaneous tissue disorders

Common : Rash

Rare : Urticaria

### **Renal and urinary disorders**

Very rare : Acute renal failure, haematuria, proteinuria, nephrotic syndrome, interstitial nephritis, renal papillary necrosis

#### 4.9 Overdose

There is no typical clinical picture resulting from diclofenac over dosage. Over dosage can cause symptoms such as headache, nausea, vomiting, epigastric pain, gastrointestinal haemorrhage, diarrhoea, dizziness, disorientation, excitation, coma, drowsiness, tinnitus, fainting or convulsions.

#### **Therapeutic measures**

Management of acute poisoning with NSAIDs, including diclofenac, essentially consists of supportive measures and symptomatic treatment.

5.1 Pharmacodynamic Properties

Therapeutic category: Non-Steroidal Anti-inflammatory Drug (NSAID)

### Mechanism of action

The exact mechanism of action of diclofenac has not been clearly established, but many of the actions appear to be associated principally with the inhibition of prostaglandin synthesis. Diclofenac inhibits the synthesis of prostaglandins in body tissues by inhibiting cyclooxygenase, an enzyme that catalyses formation of prostaglandin precursors (endoperoxides) from arachidonic acid.

### 5.2 Pharmacokinetic Properties

After ingestion of the diclofenac slow release tablet, the active principle is slowly released into the gastrointestinal contents. Once released from the tablet, diclofenac is rapidly absorbed from the gastrointestinal tract but is subject to first-pass metabolism. Peak plasma concentrations occur about 6 - 8 hours after administration of the prolonged release tablets when taken with a meal. Food and antacids decrease the rate but not the extent of absorption of diclofenac. The active substance is 99.7% bound to plasma proteins, mainly albumin.

Diclofenac enters the synovial fluid and peak synovial fluid concentrations at steady state exceed plasma concentrations. Furthermore, elimination from the synovial fluid is slower than from plasma. Diclofenac and

its metabolites cross the placenta and traces of diclofenac have been found in the milk of lactating women. The half-life for the terminal elimination phase is 1-2 hours.

Approximately 60% of the administered dose is excreted via the kidneys in the form of metabolites and less than 1% in unchanged form. About 30% of the dose is excreted via the bile in metabolised form.

In patients with impaired renal function, accumulation of diclofenac sodium has not been reported. However, half-life of diclofenac may be prolonged in patients with severe renal impairment.

## 5.3 Preclinical Safety Data

Multiple dose studies were performed in rats, dogs and monkeys. At toxic doses there were gastrointestinal ulcers and disorders in the blood picture in all species. Genetic toxicology studies with diclofenac sodium show that diclofenac is not a mutagen. Carcinogenicity studies have been conducted in mice and rats. No carcinogenic effect has been seen.

## 6. PHARMACEUTICAL PARTICULARS

## 6.1 List of Excipients

Sr. No.	Name of Raw Material	Specification
1.	Maize Starch	BP
2.	Dicalcium phosphate	BP
3.	Maize starch (P)	BP
4.	Methyl Paraben	BP
5.	Propyl Paraben	BP
6.	Magnesium stearate	BP
7.	Microcrystalline Cellulose	BP
8.	Purified Talc	BP

9.	Sodium starch glycolate	BP
10.	Readycoat AMB Green colour	BP
11.	Purified water	BP

6.2 Incompatibilities

None

6.3 Shelf Life

36 Months

6.4 Special Precautions for Storage

Store at temperature not exceeding  $30^\circ C$ 

6.5 Nature and contents of container

Blister Pack of 1 x 10 Tablets

6.6 Special precautions for disposal and other handling

No special requirement

# **10. DATE OF REVISION OF THE TEXT**

As per revision