#### 1. Name of the medicinal product

DESLORATADINE SYRUP 2.5MG/5ML

## 2. Qualitative and quantitative composition

**	ACTIVE IN	GREDIENTS		
APPROVED NAME	SPECIFICATION OR REFERENCE TEXT	QTY/ ML		% OVERAGES
		MG/5 ML	%W/W/5 ML	
DESLORATADINE*	INHOUSE	0.002 GM	0.04 %	5.00 %

#### **INACTIVE INGREDIENTS**

APPROVED NAME	SPECIFICATION OR REFERENCE TEXT	QTY/ML		REASON FOR INCLUSION
		MG/5 ML	%W/W/5 ML	1
DEMINERAL WATER	BP	1.000 ML	20.00 %	VEHICLE
SODIUM PROPYL PARABEN	ВР	0.005 GM	0.10 %	PRESERVATIVE
SUCROSE	BP	2.500 GM	50.00 %	SWEETNER
SORBITOL SOLUTION 70%	ВР	1.450 GM	29.00 %	SWEETNER
SODIUM METHYL PARABEN	BP	0.022 GM	0.44 %	PRESERVATIVE
CITRIC ACID ANHYDROUS	₿P	0.005 GM	0.10 %	BUFFURING AGENT
SODIUM BENZOATE	BP	0.0005 GM	0.01 %	PRESERVATIVE
BRONOPOL	BP	0.0025 GM	0.05 %	PRESERVATIVE
SUNSET YELLOW COLOUR	INHOUSE	0.0003 GM	0.006 %	COLOURANT
ESSENCE MIX FRUIT	INHOUSE	0.010 ML	0.20 %	FLAVOURANT
ESSENCE CHERRY SUPREME	INHOUSE	0.010 ML	0.20 %	FLAVOURANT

<sup>\* 5.00 %</sup> Overages are added on label claim.

#### 3. Pharmaceutical form

Oral Syrup

#### 4. Clinical particulars

#### 4.1 Therapeutic indications

Desloratadine is indicated in Adults and Adolescents aged 12 years or older for the relief of symptoms associated with:

- Allergic Rhinitis
- Urticaria

#### 4.2 Posology and method of administration

Adults and adolescents (12 years of age and over)





The recommended dose of Akerol Syrup is 10 ml (5 mg) oral solution once a day. Paediatric population

The prescriber should be aware that most cases of rhinitis below 2 years of age are of infectious origin and there are no data supporting the treatment of infectious rhinitis with Akerol Svrup.

Children 1 through 5 years of age: 2.5 ml (1.25 mg) Akerol Syrup once a day. Children 6 through 11 years of age: 5 ml (2.5 mg) Akerol Syrup once a day.

#### Method of administration

Oral use.

The dose can be taken with or without food.

#### 4.3 Contraindications

Hypersensitivity to the Active substance. Loratadine or to any of the excipients of this.

#### 4.4 Special warnings and precautions for use

In the case of Severe Renal Insufficiency, Desloratedine should be used with caution.

Desloratedine contains lactose. Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine.

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

No clinically relevant interactions were observed in clinical trials with Desloratadine in which Erythromycin or Ketoconazole were co-administered .

#### Paediatric population

Interaction studies have only been performed in adults.

In a Clinical Pharmacology trial Desloratedine taken concomitantly with alcohol did not Potentiate the performance impairing effects of Alcohol. However, cases of Alcohol Intolerance and intoxication have been reported during post-marketing use. Therefore, caution is recommended if alcohol is taken concomitantly.

## 4.6 Pregnancy and lactation

#### Pregnancy

A large amount of data on pregnant women (more than 1,000 pregnancy outcomes) indicate no Malformative nor Foeto/Neonatal toxicity of Desloratadine.

Animal studies do not indicate direct or indirect harmful effects with respect to Reproductive toxicity. As a precautionary measure, it is preferable to avoid the use of Desloratadine during Pregnancy.

#### **Breast-feeding**

Desloratedine has been identified in breast fed Newborns/Infants of treated women. The effect of Desloratedine on Newborns/Infants is unknown. A decision must be made whether to discontinue breast-feeding or to discontinue/Abstain from Desloratedine therapy taking into Account the benefit of Breast-feeding for the child and the benefit of therapy for the woman.

#### Fertility

There are no data available on male and female fertility.

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





Desloratedine has no or negligible influence on the ability to drive and use machines based on clinical trials. Patients should be informed that most people do not experience drowsiness. Nevertheless, as there is individual variation in response to all medicinal products, it is recommended that patients are advised not to engage in activities requiring Mental Alertness, such as driving a Car or using machines, until they have established their own response to the medicinal product.

#### 4.8 Undesirable effects

#### Summary of the safety profile

In clinical trials in a range of indications including allergic rhinitis and chronic idiopathic urticaria, at the recommended dose of 5 mg daily, undesirable effects with desionated were reported in 3 % of patients in excess of those treated with placebo. The most frequent of adverse events reported in excess of placebo were fatigue (1.2 %), dry mouth (0.8 %) and headache (0.6 %).

#### Paediatric population

In a clinical trial with 578 adolescent patients, 12 through 17 years of age, the most common adverse event was headache; this occurred in 5.9% of patients treated with desloratedine and 6.9% of patients receiving placebo.

#### Tabulated list of adverse reaction

The frequency of the clinical trial adverse reactions reported in excess of placebo and other undesirable effects reported during the post-marketing period are listed in the following table. Frequencies are defined as very common ( $\geq 1/10$ ), common ( $\geq 1/100$  to < 1/10), uncommon ( $\geq 1/1000$ ), rare ( $\geq 1/1000$ ), rare ( $\geq 1/1000$ ), very rare (< 1/1000) and not known (cannot be estimated from the available data).

Psychiatric disorders: Hallucinations

**Nervous system disorders**: Headache, Dizziness, somnolence, insomnia, psychomotor hyperactivity, seizures

Cardiac disorders: Tachycardia, palpitations, QT prolongation

Gastrointestinal disorders: Dry mouth, Abdominal pain, nausea, vomiting, dyspepsia, diarrhoea

Hepatobiliary disorders: Elevations of liver enzymes, increased bilirubin, hepatitis, Jaundice Skin and subcutaneous tissue disorders: Photosensitivity

Musculoskeletal and connective tissue disorders : Myalgia

General disorders and administration site conditions: Fatigue, Hypersensitivity reactions (such as Anaphylaxis, Angioedema, Dyspnoea, Pruritus, Rash, and Urticaria, Asthenia

Paediatric population: Other undesirable effects reported during the post-marketing period in paediatric patients with an unknown frequency included QT prolongation, arrhythmia, and bradycardia.

#### 4.9 Overdose

The adverse event profile associated with overdosage, as seen during post-marketing use, is similar to that seen with therapeutic doses, but the magnitude of the effects can be higher.

#### **Treatment**

In the event of Overdose, consider Standard measures to remove unabsorbed active substance. Symptomatic and supportive treatment is recommended.

Desloratadine is not eliminated by haemodialysis; it is not known if it is eliminated by peritoneal dialysis.

#### **Symptoms**

Based on a multiple dose clinical trial, in which up to 45 mg of desloratadine was administered (nine times the clinical dose), no clinically relevant effects were observed.

#### Paediatric population

The adverse event profile associated with overdosage, as seen during post-marketing use, is similar to that seen with therapeutic doses, but the magnitude of the effects can be higher.

#### 5. Pharmacological properties

#### 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other Antihistamines for Systemic use.

#### Mechanism of action

Desloratedine is a non-sedating, long-acting histamine antagonist with selective peripheral H1-receptor antagonist activity. After oral administration, desloratedine selectively blocks peripheral histamine H1- receptors because the substance is excluded from entry to the central nervous system.

#### Pharmacodynamic effects

Desloratedine has demonstrated Antiallergic properties from in vitro studies. These include inhibiting the release of Proinflammatory cytokines such as IL-4, IL-6, IL-8, and IL-13 from human mast cells/basophils, as well as inhibition of the expression of the adhesion molecule P- selectin on endothelial cells. The clinical relevance of these observations remains to be confirmed.

#### Clinical efficacy and safety

In a multiple dose clinical trial, in which up to 20 mg of Desloratadine was administered daily for 14 days, no statistically or clinically relevant cardiovascular effect was observed. In a Clinical pharmacology trial, in which desloratadine was administered at a dose of 45 mg daily (nine times the clinical dose) for ten days, No prolongation of QTc interval was seen.

No clinically relevant changes in Desloratadine Plasma Concentrations were observed in Multiple- dose Ketoconazole and Erythromycin interaction trials.

Desloratadine does not readily penetrate the central nervous system. In controlled clinical trials, at the recommended dose of 5 mg daily, there was no excess incidence of somnolence as compared to placebo. Desloratadine given at a single daily dose of 7.5 mg did not affect psychomotor performance in clinical trials.

#### .5.2 Pharmacokinetic properties

#### Absorption

Desloratedine plasma concentrations can be detected within 30 minutes of administration. Desloratedine is well absorbed with maximum concentration achieved after approximately 3 hours; the terminal phase half-life is approximately 27 hours. The degree of accumulation of desloratedine was consistent with its half-life (approximately 27 hours) and a once daily dosing frequency. The bioavailability of desloratedine was dose proportional over the range of 5 mg to 20 mg.

In a pharmacokinetic trial in which patient demographics were comparable to those of the general seasonal allergic rhinitis population, 4 % of the subjects achieved a higher concentration of desloratedine. This percentage may vary according to ethnic background. Maximum desloratedine concentration was about 3-fold higher at approximately 7 hours with a terminal phase half-life of approximately 89 hours. The safety profile of the self-subjects was not different from that of the general population.

Distribution

WES COST

Designated is moderately bound (83 % - 87 %) to plasma proteins. There is no evidence of clinically relevant medicine accumulation following once daily dosing of designated (5 mg to 20 mg) for 14 days.

#### **Biotransformation**

The Enzyme responsible for the metabolism of desloratedine has not been identified yet, and therefore, some interactions with other medicinal products cannot be fully excluded. Desloratedine does not inhibit CYP3A4 in vivo, and in vitro studies have shown that the medicinal product does not inhibit CYP2D6 and is neither a substrate nor an inhibitor of P-glycoprotein.

#### **Elimination**

In a single dose trial using a 7.5 mg dose of desloratadine, there was no effect of food (high-fat, high caloric breakfast) on the disposition of desloratadine. In another study, grapefruit juice had no effect on the disposition of desloratadine.

#### Renally impaired patients

The pharmacokinetics of desloratedine in patients with chronic renal insufficiency (CRI) was compared with that of healthy subjects in one single-dose study and one multiple dose study. In the single-dose study, the exposure to desloratedine was approximately 2 and 2.5-fold greater in subjects with mild to moderate and severe CRI, respectively, than in healthy subjects. In the multiple-dose study, steady state was reached after Day 11, and compared to healthy subjects the exposure to desloratedine was ~1.5-fold greater in subjects with mild to moderate CRI and ~2.5-fold greater in subjects with severe CRI. In both studies, changes in exposure (AUC and Cmax) of desloratedine and 3-hydroxydesloratedine were not clinically relevant.

#### 5.3 Preclinical safety data

Desloratedine is the Primary Active metabolite of Loratedine. Non-clinical studies conducted with desloratedine and loratedine demonstrated that there are no qualitative or quantitative differences in the toxicity profile of desloratedine and loratedine at comparable levels of exposure to desloratedine.

Non-clinical data with Desloratadine reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, and toxicity to reproduction. The lack of carcinogenic potential was demonstrated in studies conducted with desloratadine and loratadine.

#### 6. Pharmaceutical particulars

#### 6.1 List of Excipients

- Demineral Water
- Sodium Propyl Paraben
- Sucrose
- Sorbitol Solution 70%
- Sodium Methyl Paraben
- Citric Acid Anhydrous
- Sodium Benzoate
- Bronopol
- Sunset Yellow Colour





- Essence Mix Fruit
- Essence Cherry Supreme

#### 6.2 Incompatibilities

None known.

- 6.3 Shelf life
- 3 Years

## 6.4 Special precautions for storage

Store in a dry place at a temperature below 30°C.

# 6.5 Nature and contents of container 60 ml Amber Pet Bottle

## 6.6 Special precautions for disposal and other handling

Not applicable.

## 7. Marketing authorisation holder

West Coast Pharmaceutical Works Ltd, Ahmedabad

8. Marketing authorisation number(s)

Not applicable.

9. Date of first authorisation/renewal of the authorisation

Not applicable.

10. Date of revision of the text

August 2016



