

## **1. NAME OF THE FINISHED PHARMACEUTICAL PRODUCT**

### **TRANGEL**

(Diclofenac Diethylammonium Gel)

Gel for topical administration

## **2. QUALITATIVE AND QUANTITATIVE COPOSITION**

### **Label claim**

Each gm contains

Diclofenac Diethylammonium Salt B.P. 1.16% w/w eq. to Diclofenac Sodium B.P. 1% w/w

### **List of Excipients:**

Carbopol 934 B.P

Essences Cologne 530

Polyethylene Glycol B.P.

Sodium Methyl Paraben B.P.

Sodium Propyl Paraben B.P.

Triethanolamine B.P.

Isopropyl Alcohol B.P.

Freshly boiled purified water BP

## **3. PHARMACEUTICAL FORM**

Gel for topical administration

TRANGEL is available as A smooth transparent gel, slightly odour of cologne in 20 gm printed Aluminium collapsible tubes.

## **4. CLINICAL PARTICULARS**

### **4.1 THERAPEUTIC INDICATIONS**

Trangel is indicated for use in musculoskeletal complaints, especially arthritis (rheumatoid arthritis, osteoarthritis, spondylarthritis, ankylosing spondylitis), gout attacks and is used commonly to treat mild to moderate post operative or post-traumatic pain, particular when inflammation is also present.

### **4.2 Posology and method of administration**

- a) A sufficient quantity of gel should be applied and rub gently over the affected part 3-4 times daily or as prescribed by the physician.
- b) Wash hands thoroughly after each application.

External application.

#### **4.3 Method of administration**

Adults:

Trangel is applied to the skin 3 or 4 times daily and rubbed in gently. The amount needed depends on the size of the painful site.

Do not massage vigorously. The duration of treatment depends on the indication and the response obtained. Treatment beyond two weeks is not recommended with Trangel .

Children:

Total dose should not exceed 16 g per day, over all affected joints.

#### **4.4 Contraindications**

The use of Trangel is contraindicated in patients with a known hypersensitivity to diclofenac.

Trangel should not be administered in patients who have experienced asthma, urticaria, or other allergic-type reactions after taking aspirin or other NSAIDs. Severe, rarely fatal, anaphylactic-like reactions to NSAIDs have been reported in such patients

#### **4.4 Special warnings and precautions for use**

##### **Warning**

For external use only.

Wash your hands thoroughly after application of the gel.

Avoid contact with the eyes.

Limit use to intact skin. Do not apply to open wounds

If irritation persists discontinue use and contact your Doctor

##### **Precautions**

Avoid showering/bathing for at least 1 hour after the application.

Inform patient to wash his/her hands after use, unless the hands are the treated joint.

If Trangel is applied to the hand(s) for treatment; inform patient not to wash the treated hand(s) for at least 1 hour after the application.

Do not apply Trangel to open wounds.

Avoid contact of Trangel with eyes and mucous membranes.

Do not apply external heat and/or occlusive dressings to treated joints.

Avoid exposure of the treated joint(s) to natural or artificial sunlight.

Avoid concomitant use of Trangel on the treated skin site with other topical products, including sunscreens, cosmetics, lotions, moisturizers, insect repellants, or other topical medications

Concomitant use of Trangel with oral non-steroidal anti-inflammatory drugs(NSAIDs) has not been evaluated, and may increase adverse NSAIDs effects.

Do not use combination therapy with Trangel and an oral NSAID unless the benefit outweighs the risk and conduct periodic laboratory evaluations.

Avoid wearing of clothing or gloves for at least 10 minutes after applying Trangel.

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

##### Aspirin

When diclofenac is administered with aspirin, the binding of diclofenac to protein is reduced, although the clearance of free diclofenac is not altered. The clinical significance of this interaction is not known; however, as with other NSAIDs, concomitant administration of diclofenac and aspirin is not generally recommended because of the potential of increased adverse effects.

##### Anticoagulants

The effects of anticoagulants such as warfarin and NSAIDs on GI bleeding are synergistic, such that users of both drugs together have a risk of serious GI bleeding higher than users of either drug alone.

##### ACE-Inhibitors

NSAIDs may diminish the antihypertensive effect of angiotensin converting enzyme (ACE) inhibitors. This interaction should be given consideration in patients taking NSAIDs concomitantly with ACE-inhibitors.

##### Diuretics

Clinical studies, as well as post-marketing observations, have shown that NSAIDs can reduce the natriuretic effect of furosemide and thiazides in some patients. The response has been attributed to inhibition of renal prostaglandin synthesis. During concomitant therapy with NSAIDs, the patient should be observed closely for signs of renal failure [see Warnings and Precautions (5.6)], as well as to assure diuretic efficacy.

##### Lithium

NSAIDs have produced an elevation of plasma lithium levels and a reduction in renal lithium clearance. The mean minimum lithium concentration increased 15% and the renal clearance was decreased by approximately 20%. These effects have been attributed to inhibition of renal prostaglandin synthesis by the NSAID. Thus, when NSAIDs, including diclofenac, and lithium are administered concurrently, patients should be observed carefully for signs of lithium toxicity.

##### Methotrexate

NSAIDs have been reported to competitively inhibit methotrexate accumulation in rabbit kidney slices. This may indicate that they could enhance the toxicity of methotrexate. Caution should be used when NSAIDs, including diclofenac, are administered concomitantly with methotrexate.

#### Cyclosporine

Diclofenac, like other NSAIDs, may affect renal prostaglandins and increase the toxicity of certain drugs. Therefore concomitant therapy with diclofenac may increase cyclosporine's nephrotoxicity. Caution should be used when diclofenac is administered concomitantly with cyclosporine.

#### Oral Nonsteroidal Anti-inflammatory Drugs

Specific interaction studies of Trangel and oral NSAIDs were not performed. Also, the clinical trials of Trangel prohibited concomitant use of oral NSAIDs. There is systemic exposure to diclofenac following normal use of Trangel, up to 6% of the systemic levels of a single oral dose of diclofenac sodium. Therefore, concomitant administration of Trangel with oral NSAIDs or aspirin may result in increased adverse NSAID effects.

#### Topical Treatments

Concomitant use of Trangel with other topical products, including topical medications, sunscreens, lotions, moisturizers, and cosmetics, on the same skin site has not been tested and should be avoided because of the potential to alter local tolerability and absorption.

### **4.6 Fertility, pregnancy and lactation**

#### Fertility

Advise females of reproductive potential who desire pregnancy that NSAIDs, including Trangel may be associated with a reversible delay in ovulation.

#### **Pregnancy and breast-feeding**

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before taking this medicine. Trangel must not be used during the last 3 months of pregnancy, as it could harm your unborn child or cause problems at delivery.

Trangel should only be used under medical advice during the first 6 months of pregnancy and the dose should be kept as low and duration of treatment as short as possible. Trangel should only be used under medical advice during breast-feeding as diclofenac passes into breast milk in small amounts. However, Trangel should not be applied on the breasts of nursing mothers nor elsewhere on large areas of skin or for a prolonged period of time. Consult your doctor or pharmacist for further information if you are pregnant or breastfeeding.

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

Trangel, when used as directed, is not expected to have any effect on your ability to drive or use machines.

#### **4.8 Undesirable effects**

Like all medicines, Trangel can cause side effects, although not everybody gets them.

##### **Some rare and very rare side effects might be serious**

If you experience any of the following signs of allergy, STOP using Trangel and tell a doctor or pharmacist immediately:

Skin rash with blisters; hives (may affect between 1 and 10 in every 10,000 people).

Wheezing, shortness of breath or feeling of tightness in the chest (asthma) (may affect less than 1 in every 10,000 people).

Swelling of the face, lips, tongue or throat (may affect less than 1 in every 10,000 people).

##### **Other side effects which may occur are**

usually mild, passing and harmless (if you are concerned, tell a doctor or pharmacist).

##### **Common side effects(may affect between 1 and 10 in every 100 people)**

Skin rash, itching, reddening or smarting of the skin

##### **Very rare side effects (may affect less than 1 in every 10,000 people)**

the skin may be more sensitive to the sun. Possible signs are sunburn with itching, swelling and blistering.

##### **Some side effects have unknown frequency (cannot be estimated from available information):**

local application site irritation, skin discolouration.

##### **Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse.

#### **4.9 Overdose**

Symptoms following acute NSAID overdoses have been typically limited to lethargy, drowsiness, nausea, vomiting, and epigastric pain, which have been generally reversible with supportive care. Gastrointestinal bleeding has occurred. Hypertension, acute renal failure, respiratory depression, and coma have occurred, but were rare .

Manage patients with symptomatic and supportive care following an NSAID overdose. There are no specific antidotes. Forced diuresis, alkalization of urine, hemodialysis, or hemoperfusion may not be useful due to high protein binding.

-Management of overdose with NSAIDs essentially consists of supportive and symptomatic measures. There is no typical clinical picture resulting from Diclofenac overdose. Gastric lavage and use of activated charcoal can be examined, especially if time has passed since the ingestion.

## **5.0 Pharmacological properties**

### **5.1 Pharmacodynamic properties**

#### **Mechanisms of Action/Effect**

-Trangel is an analgesic, anti-inflammatory preparation for topical application.

-Trangel Ultra containing Diclofenac diethylammonium relieves pain, reduces oedema, and shorten the time to return to normal functions, in inflammation of traumatic or rheumatic origin.

Diclofenac has been shown to inhibit prostaglandin biosynthesis; and this is regarded as an important factor in its mechanism of action.

### **5.2 Pharmacokinetic properties**

The mechanism of action of diclofenac is similar to that of other nonsteroidal anti-inflammatory drugs. Diclofenac inhibits the enzyme, cyclooxygenase (COX), an early component of the arachidonic acid cascade, resulting in the reduced formation of prostaglandins, thromboxanes and prostacylin. It is not completely understood how reduced synthesis of these compounds results in therapeutic efficacy.

### **5.3 Preclinical safety data**

There are no other preclinical safety data of relevance to the prescriber apart from those already detailed in the SPC

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Carbopol 934 B.P

Essences Cologne 530

Polyethylene Glycol B.P.

Sodium Methyl Paraben B.P.

Sodium Propyl Paraben B.P.

Triethanolamine B.P.

Isopropyl Alcohol B.P.

Freshly boiled purified water BP

**6.2 Incompatibilities**

Not applicable

**6.3 Shelf life**

3 years

**6.4 Special precautions for storage**

Store on or below 30°C. Keep medicine out of reach of children. Do not freeze

**6.5 Nature and contents of container**

1x20 gm tube in carton.

**6.6 Instructions for use and handling and disposal**

No special requirements.

**7. Marketing authorization holder**

Applicant's Name : **Rene Pharmacy (R) Ltd.**  
Address : KN 82 street, NDAMAGE Building,  
Nyarugenege District, opp. T-2000 New,  
B.P. 6033, Kigali, Rwanda.

**8. Number(s) in the national register of finished pharmaceutical products**

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**9. Date of first authorization/renewal of the authorization**

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

February, 2017