Summary of Product Characteristics (SmPC)

1. Name of the medicinal product

1.1 (Invented) Name of the medicinal product

ACECLOFENAC, LINSEED OIL, METHYL SALICYLATE & CAPSAICIN GEL

1.2 Strength

Each 30 gm contains

Aceclofenac BP	1.5%w/w
Linseed oil BP	3.0% w/w
Methyl Salicylate BP	10.0% w/w
Capsaicin USP	0.01% w/w
Benzyl alcohol BP (As preservative)	1.0% w/w
Gel Base	Q.S

1.3 Pharmaceutical Form

Gel

2. Qualitative and Quantitative Formula

Batch Size: 45.0 Kg

Sr.No.	Ingredients	Label Claim	Unit Formula (%w/w)	% OA	Batch Formula (in gm) per Batch	Functions
Active						
1.	Aceclofenac BP*	1.5%	1.5%	5.0	708.75	Non-Steroidal Anti-Inflammatory Drug
2.	Linseed oil BP	3.0%	3.0%	5.0	1390.5	Emollient
3.	Methyl salicylate BP	10.0%	10.0%	8.0	4950	Counterirritants
4.	Capsaicin USP	0.01%	0.01%	--	4.5	Counterirritants
Excipients						
5.	Benzyl alcohol BP	1.0%	1.0%	--	450	Preservative
6.	Carbopol 940 USP	--	1.4%	--	630	Gelling agent
7.	Cremophore RH 40 IHS	--	3.5%	--	5250	Emulsifying agent
8.	Butylated Hydroxy Toluene BP	--	0.2%	--	90	Antioxidant
9.	Citric Acid Anhydrous BP	--	0.01%	--	4.5	pH Reducer
10.	Propylene Glycol BP	--	12.0%	--	5400	Humectant /Solvent
11.	Disodium Edetate BP	--	0.10%	--	45	Chelating agent
12.	Iso propyl alcohol USP	--	4.0%	--	1800	Solvent
13.	Diethyl amine USP	--	1.25%	--	562.5	pH Neutralizer
14.	Purified water USP	--	61.005%	--	27.452 Lit.	Vehicle

* Quantity of API is taken based on 100% Assay and anhydrous basis. It may vary as per assay and Loss on Drying of API. Quantity of water/Other solvent may vary according to API addition after calculation.

3. Pharmaceutical form

A White smooth homogeneous gel free from lumps and gritty particles.

4. Clinical particulars:

4.1 Therapeutic Indication:

Gel is used for pain, delayed onset muscle soreness, musculoskeletal aches and pains, arthritis, skin disorders, post herpetic neuralgia, painful polyneuropathies, diabetes and HIV-related neuropathy, post mastectomy and other conditions.

4.2 Posology and method of administration:

Apply an appropriate amount to the affected areas on the skin after cleaning or as directed by Physician.

4.3 Contraindications

Hypersensitivity to Gel is a contraindication. In addition, Gel should not be used if you have the following conditions:

- Children less than 12 years old
- Cuts
- Hypersensitivity
- Infected skin
- None
- Open wounds

4.4 Special warnings and precautions for use:

Before using Gel, inform your doctor about your current list of medications, over the counter products (e.g. vitamins, herbal supplements, etc.), allergies, pre-existing diseases, and current health conditions (e.g. pregnancy, upcoming surgery, etc.). Some health conditions may make you more susceptible to the side-effects of the drug. Take as directed by your doctor or follow the direction printed on the product insert. Dosage is based on your condition. Tell your doctor if your condition persists or worsens. Important counseling points are listed below.

- Avoid contact with eyes and mucous membranes
- Avoid eye exposure
- Keep away from children
- Use gloves to apply cream
- Wash hands after application
- Do not take by mouth. Consult with your doctor before using this medicine on open wounds, dry, chapped, irritated, or sun-burned skin.
- Wash your hands before and after applying caterpil gel. Clean and dry the skin area to be treated.
- Do not wash the treated area after immediately applying caterpil gel. Also avoid the use of other products on the treated area unless directed by your doctor.
- Applying an excessive amount may result in pilling. Use a thinner layer or lesser quantity of medicine to avoid pilling.
- Avoid getting this medication in your eyes or nose or mouth.

4.5 Interaction with other medicinal products and other forms of interaction

If you use other drugs or over the counter products at the same time, the effects of Gel may change. This may increase your risk for side-effects or cause your drug not to work

properly. Tell your doctor about all the drugs, vitamins, and herbal supplements you are using, so that you doctor can help you prevent or manage drug interactions.

4.6 Adverse Drug Reactions

The following is a list of possible side-effects that may occur from all constituting ingredients of Gel. This is not a comprehensive list. These side-effects are possible, but do not always occur. Some of the side-effects may be rare but serious. Consult your doctor if you observe any of the following side-effects, especially if they do not go away.

- No known side effects
- No side effects reported
- Allergic contact dermatitis
- Anaphylactic reactions
- Feeling of warmth
- Headache
- Vertigo
- Excitement
- Restlessness
- Application site irritation

4.7 Fertility, Pregnancy and lactation

Please consult with your doctor for case-specific recommendations.

4.7 Effects on ability to drive and use machines:

If you experience drowsiness, dizziness, hypotension or a headache as side-effects when using Gel 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 Gel. Always consult with your doctor for recommendations specific to your body and health conditions.

4.9 Overdose:

- Do not use more than prescribed dose. Taking more medication will not improve your symptoms; rather they may cause poisoning or serious side-effects. If you suspect that you or anyone else who may have overdosed of Gel, please go to the emergency department of the closest hospital or nursing home. Bring a medicine box, container, or label with you to help doctors with necessary information.
- Do not give your medicines to other people even if you know that they have the same condition or it seems that they may have similar conditions. This may lead to overdosage.
- Please consult your physician or pharmacist or product package for more information.

5. Pharmacological properties

5.1 Pharmacotherapeutic Group

Aceclofenac

Pharmacotherapeutic group: Non-Steroidal Anti-Inflammatory Drug

ATC Code: M01AB16

Methyl salicylate

Pharmacotherapeutic group: Counterirritants

ATC Code: M02AC

Capsaicin

Pharmacotherapeutic group: Counterirritants

ATC Code: N01BX

Benzyl Alcohol

Pharmacotherapeutic group: Preservative

ATC Code: P03AX06

Linseed Oil

Pharmacotherapeutic group: Emollient

ATC Code: A06AC

5.2 Pharmacodynamic properties

1.Aceclofenac relieves pain & inflammation.

2.Methyl Salicylate provides counter-irritant action.

3.Linseed oil helps in reducing inflammation.

4.Capsaicin provides counter-irritant action.

5.3 Pharmacokinetic properties

Aceclofenac

Pharmacology: Aceclofenac is a nonsteroidal agent with marked anti-inflammatory and analgesic properties. It has higher anti-inflammatory action than conventional NSAIDs and is a cytokine inhibitor. The mode of action of aceclofenac is largely based on the inhibition of prostaglandin synthesis. Aceclofenac is a potent inhibitor of the enzyme cyclooxygenase, inflammatory cytokines interleukin IL1, tumor necrosis factor and prostaglandins E2. Cyclooxygenase is involved in the production of prostaglandins (chemicals in the body) which cause pain, swelling and inflammation.

Pharmacokinetics: After oral administration, aceclofenac is rapidly and completely absorbed as unchanged drug. Peak plasma concentrations are reached approximately 1-3 hrs following ingestion. Aceclofenac is highly protein bound (>99%). Aceclofenac penetrates into the synovial fluid, where the concentrations reach approximately 57% of those in plasma. The volume of distribution is approximately 25 L. The mean plasma elimination $t_{½}$ is around 4 hrs. Aceclofenac is metabolized to a major metabolite 4'-hydroxyaceclofenac and other metabolites 5 hydroxyaceclofenac, 4'-hydroxydiclofenac, diclofenac and 5 hydroxydiclofenac.

Approximately $^{2}/_{3}$ of the administered dose is excreted via the urine, mainly as hydroxymetabolites. No changes in the pharmacokinetics of aceclofenac have been detected in the elderly.

Capsaicin

Pharmacology: ***Pharmacodynamics:*** *Mechanism of Action:* Capsaicin activates afferent nociceptive neurons and evokes sensations ranging from hotness to burning. Its analgesic properties are mediated by the depletion of substance P that leads to the desensitization of small afferent sensory neurons. Capsaicin binds to a specific nerve membrane receptor, the transient receptor potential V1 (TRPV1) receptor (previously known as vanilloid receptor, VR1). The binding of capsaicin to TRPV1 receptor in small fiber sensory afferent nerve endings activates the receptor and this leads to an influx of calcium, and the release of inflammatory neuropeptides. This mediates the pungent properties of capsaicin and limits its tolerability. Following the receptor activation, these neurons are functionally desensitized to further painful stimuli and this leads to analgesia. In addition, there may be degeneration of nociceptive fibers. Capsaicin down regulates these voltage-activated calcium channels by dephosphorylation (via a calcium-dependent activation of calcineurin). This is the mechanism by which capsaicin reduces inflammatory hyperalgesia.

Pharmacokinetics:

Topical capsaicin is well-absorbed from the skin. Maximal cutaneous concentrations of capsaicin are rapidly achieved when capsaicin is applied topically. These concentrations

are greater with isopropyl preparations compared with propylene glycol or mineral oil preparations. The half-life ($t_{½}$) of capsaicin is approximately 24 hrs. In a study of 12 subjects, the topical application of 3% solutions of capsaicin (capsaicin 55%, hydrocapsaicin 35% and other analogues 10%) using 3 different vehicle preparations (isopropyl alcohol 70%, mineral oil and propylene glycol which contained alcohol 20%) was evaluated. Capsaicinoids were detected in the stratum corneum within 1 min after application and a steady state was reached shortly. The maximum concentration was almost 3 times greater in the subjects who received the isopropyl alcohol 70% preparation compared with the mineral oil and propylene glycol preparations. This indicated the greater relative solubility of the capsaicinoids in the larger volume of alcohol. The $t_{½}$ of capsaicin was approximately 24 hrs in all 3 preparations. In mice, capsaicin is distributed widely to the brain, spinal cord and liver after IV administration. Capsaicinoids are metabolised by cytochrome P-450 enzymes to macrocyclic, alkyl dehydrogenated, omega-1 hydroxylated products. Dihydrocapsaicin is the major metabolite of capsaicin. Dihydrocapsaicin and its metabolites are excreted by the kidney. Capsaicin is also renally cleared.

Methyl salicylate is a topically applied pain-relieving cream that is greaseless, nonstaining and pleasant-smelling. Applied on the skin, it produces a warm sensation which penetrates deep down, providing lasting relief from pain, skin irritation or stiffness. Methyl salicylate is hypoallergenic and soothing.

5.4 Preclinical safety data

None known.

6. Pharmaceutical particulars

6.1 List of Excipients

List of Excipients
Carbopol 940 USP
Cremophore RH 40 IHS
Butylated Hydroxy Toluene BP
Citric Acid Anhydrous BP
Popylene Glycol USP
Disodium Edetate BP
Iso Propyl Alcohol USP
Diethyl amine
Purified Water BP

6.2 Incompatibilities

Not Applicable

6.3 Shelf life

24 months from the date of manufacturing.

6.4 Special precautions for storage

Keep in cool & dry place. Protet from light.

6.5 Nature and contents of container

30 gm Cream Tube is packed in printed carton along with package insert.

6.6 Special precautions for disposal

No special requirements.

7. REGISTRANT

ONIFAM LABORATORIES LTD
Amori Shopping Plaza,
113 Idimu Road,
Egbeda, P.O. Box 4940,
Ikeja Lagos, Nigeria.

8. DATE OF REVISION OF THE TEXT

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9. NAME AND ADDRESS OF MANUFACTURER

YASH MEDICARE PVT. LTD.
Mfg. At: Near Sabar Daily, Talod Road,
P.O Hajipur, Tal- Himatnagar, City- Hajipur-383006,
Dist- Sabarkantha, Gujarat, India.