# SUMMARY OF PRODUCT CHARACTERISTICS

## 1. NAME OF THE FINISHED PHARMACEUTICAL PRODUCT

NEFORT
Metformin Hydrochloride Tablets

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each film coated tablet contains
Metformin Hydrochloride BP : 500 mg
Excipients : Q.S.
Colour : Titanium dioxide
For excipients, see 6.1.

## 3. PHARMACEUTICAL FORM

Tablet
For oral administration.

## 4. CLINICAL PARTICULARS

### 4.1 Therapeutic indications

**NEFORT** is indicated for:
Type II diabetes mellitus when diet has failed and especially if the patient is overweight. **NEFORT** can be given alone as initial therapy, or can be administered in combination with a sulphonylurea or insulin.

### 4.2 Posology and method of administration

It is important that NEFORT tablets be taken in divided doses with meals.

**Adults:** Initially, one 500 mg tablet three times a day, with or after food.
After 10 to 15 days the dose should be adjusted, or increased to 850 mg or 1000 mg twice daily. A slow increase in dose may improve gastro-intestinal tolerability. If control is incomplete a cautious increase in dosage to a maximum of 3 g daily is justified. Once control has been obtained it may be possible to reduce the dosage of NEFORT.

**Children:** NEFORT is not recommended for use in type 1 diabetes mellitus.
**Elderly:** NEFORT is indicated in the elderly, but not when renal function is impaired.

**Method of administration:** Oral

## 4.3 Contraindications

• Hypersensitivity to metformin hydrochloride or any of the excipients.
• Diabetic ketoacidosis, diabetic pre-coma, or the history thereof.
• Impaired renal function.
• Pancreatitis.
• Chronic liver disease.
• History of or states associated with lactic acidosis such as shock or pulmonary insufficiency.
• Cardiac failure and recent myocardial infarction.
• Conditions associated with hypoxia.
• Hepatic insufficiency, acute alcohol intoxication, alcoholism.
• Safety in pregnancy and lactation has not been established.
• Children - safety and efficacy have not been established.

## 4.4 Special warnings and precautions for use

**Lactic acidosis:**
Lactic acidosis is a rare, but serious (high mortality in the absence of prompt treatment), metabolic complication that can occur due to NEFORT accumulation. Reported cases of lactic acidosis in patients on NEFORT have occurred primarily in diabetic patients with significant renal failure. The incidence of lactic acidosis can and should be reduced by assessing also other associated risk factors such as poorly controlled diabetics, ketosis, prolonged fasting, excessive alcohol intake, hepatic insufficiency and any condition associated with hypoxia.
**Diagnosis:**
Lactic acidosis is characterized by acidotic dyspnoea, abdominal pain and hypothermia followed by coma. Diagnostic laboratory findings are decreased blood pH, plasma lactate levels above 5 mmol/L, and an increased anion gap and lactate/pyruvate ratio.
If metabolic acidosis is suspected, metformin should be discontinued and the patient should be hospitalized immediately.

**Renal function:**
As NEFORT is excreted by kidney, serum creatinine levels should be determined before initiating treatment and regularly thereafter:
• At least annually in patients with normal renal function,

• At least two to four times a year in patients with serum creatinine levels at the upper limit of normal and in elderly subjects.

Decreased renal function in elderly subjects is frequent and asymptomatic. Special caution should be exercised in situations where renal function may become impaired, for example when initiating antihypertensive therapy or diuretic therapy and when starting therapy with a NSAID.

The administration of NEFORT may be associated with increased cardiovascular mortality as compared to treatment with diet alone or diet with insulin.

Administration of iodinated contrast agent:

As the intravascular administration of iodinated contrast materials in radiological studies can lead to renal failure, NEFORT should be discontinued prior to, or at the time of the test and not reinstituted until 48 hours afterwards, and only after renal function has been re-evaluated and found to be normal.

**Surgery:**

NEFORT should be discontinued 48 hours before elective surgery with general anesthesia and should not be usually resumed earlier than 48 hours afterwards.

**Other precautions:**

- All patients should continue their diet with a regular distribution of carbohydrate intake during the day. Overweight patients should continue their energy-restricted diet.
- The usual laboratory tests for diabetes monitoring should be performed regularly.
- Although NEFORT alone never causes hypoglycaemia, caution is advised when it is used in combination with insulin or sulphonylureas.

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

**Inadvisable combinations:**

**Alcohol:**

Increased risk of lactic acidosis in acute alcohol intoxication, particularly in case of:

- Fasting or malnutrition,
- Hepatic insufficiency.

Avoid consumption of alcohol and alcohol-containing medications.

**Iodinated contrast agents:**

Intravascular administration of iodinated contrast agents may lead to renal failure, resulting in **NEFORT** accumulation and a risk of lactic acidosis.

**NEFORT** should be discontinued prior to, or at the time of the test and not reinstituted until 48 hours afterwards, and only after renal function has been re-evaluated and found to be normal.

**Glucocorticoids (systemic and local routes), beta-2-agonists, and diuretics** have intrinsic hyperglycaemic activity. Inform the patient and perform more frequent blood

glucose monitoring, especially at the beginning of treatment. If necessary, adjust the dosage of the antidiabetic drug during therapy with the other drug and upon its discontinuation.
**ACE-inhibitors** may decrease the blood glucose levels. If necessary, adjust the dosage of the antidiabetic drug during therapy with the other drug and upon its discontinuation.
**Cimetidine:** Reduced renal clearance of NEFORT has been reported during cimetidine therapy, so a dose reduction should be considered.
**Anticoagulants:** NEFORT has been reported to diminish the activity of warfin, and so dose adjustments of NEFORT should be considered.
**Sulphonylurea:** Concomitant therapy of NEFORT with sulphonylurea may cause hypoglycaemia.
**Vitamins:** Long-term treatment with NEFORT may cause vitamin $B_{12}$ mal-absorption in the gastro-intestinal tract, thus a dose reduction of NEFORT should be considered.

## 4.5 Pregnancy and lactation

### Pregnancy
The use of **NEFORT** during pregnancy is not advised. There is no information available concerning the safety of **NEFORT** during lactation.

### Lactation
Metformin passes into breast milk in tiny amounts and has not been linked with side effects in any breastfed babies. Metformin would not be expected to cause side effects but contact your health visitor, midwife, pharmacist or doctor as soon as possible if your baby: is not feeding as well as usual.

### Fertility
Fertility of male or female rats was unaffected by metformin when administered at doses as high as 600 mg/kg/day, which is approximately three times the maximum recommended human daily dose based on body surface area comparisons.

## 4.7 Effects on ability to drive and use machines
If your blood sugar levels are stable, taking metformin should not affect your ability to drive, cycle or use machinery and tools. Metformin itself will not make your blood sugar levels too low, but your doctor might prescribe it alongside other medicines for diabetes that can affect your blood sugar.

## 4.8 Undesirable effects

### Blood and the lymphatic system disorders:

*Less frequent*: Megaloblastic anaemia
**Nervous system disorders:**
*Frequent*: Metallic taste
**Gastro-intestinal disorders:**
*Frequent*: Anorexia, nausea, vomiting, constipation, and diarrhoea.
**Renal and urinary disorders:**
*Less frequent*: Ketoacidosis and ketonuria.
**Hepato-biliary disorders:**
*Less frequent*: Severe cholestatic hepatitis.
**General disorders:**
*Less frequent*: Hypersensitivity, hypoglycaemia.

### 4.9 Overdose

Hypoglycaemia can occur when **NEFORT** is given concomitantly with a sulphonylurea, insulin or alcohol. In excessive dosage, and particularly if there is a possibility of accumulation, lactic acidosis may develop. Intense symptomatic and supportive therapy is recommended which should be particularly directed at correcting fluid loss and correcting blood glucose levels.

**Treatment of overdosage:**
There is no specific antidote for overdose with **NEFORT**. Treatment is supportive and symptomatic and should be directed at correcting fluid loss and metabolic disturbances.

| For management of a suspected drug overdose, contact your regional Poison Control CentreImmediately. |
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## 5. PHARMACOLOGICAL PROPERTIES

### 5.1 Pharmacodynamic properties

Metformin is a biguanide oral anti-hyperglycaemic agent. Its mode of action is thought to be increased peripheral glucose utilization mediated by increased insulin sensitivity and inhibition of increased hepatic and renal gluconeogenesis.

### 5.2 Pharmacokinetic properties

**Absorption:**
After oral administration, metformin absorption is saturable and incomplete. It is assumed that the pharmacokinetics of metformin absorption is non-linear.

**Distribution:**
Plasma protein binding is negligible. Metformin partitions into erythrocytes. The blood peak is lower than the plasma peak and appears at approximately the same time. The red blood cells most likely represent a secondary compartment of distribution.
**Metabolism:**
Metformin is excreted unchanged in the urine. No metabolites have been identified in humans.
**Elimination:**
Renal clearance of metformin is >400 mL/min, indicating that metformin is eliminated by glomerular filtration and tubular secretion. When renal function is impaired, renal clearance is decreased in proportion to that of creatinine and thus the elimination half-life is prolonged, leading to increased levels of metformin in plasma.

### 5.2 Preclinical Safety Data
Preclinical data reveal no special hazard for humans based on conventional studies on safety, pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential, toxicity to reproduction.

## 6. PHARMACEUTICAL PARTICULARS

### 6.1 List of Excipients

| Name of Material | Specification |
|---|---|
| Micro Crystalline Cellulose Powder | BP |
| Colloidal anhydrous Silica BP | BP |
| Gelatin | BP |
| Sodium benzoate | BP |
| Purified Water | BP |
| Magnesium Stearate | BP |
| Purified Talc | BP |
| Croscarmellose Sodium | BP |
| Hydrogenated castor oil | BP |
| Film Coat Titanium Dioxide | IHS |
| Isopropyl alcohol | BP |

### 6.2 Incompatibilities
Not Applicable

### 6.3 Shelf Life

36 Months

**6.4 Special Precautions for Storage**

Store below 30ºC in a cool and dry place. Protect from heat, light and moisture.
KEEP OUT OF REACH OF CHILDREN.

**6.5 Nature and Contents of Container**

10 × 10 Alu-PVC Blister Pack.

**6.6 Instructions for use and handling**

No special requirements.

## 7. MARKETING AUTHORISATION HOLDER

SAGA
LIFESCIENCES LIMITED

Ahmedabad
Gujarat, India.
E-mail: info@sagalabs.com
URL: www.sagalabs.com

## 8. NUMBER(S) IN THE NATIONAL REGISTER OF FINISHED PHARMACEUTICAL PRODUCTS

06965/07557/NMR/2021

## 9. DATE OF FIRSHT AUTHORISATION/RENEWAL OF THE AUTHORISATION

27/12/2021

## 10. DATE OF REVISION OF THE TEXT

01 April 2026