

**Patient leaflet in accordance with the Pharmacists' Regulations (Preparations) -  
1986**

**This medicine is dispensed with a doctor's prescription only**

## **Insulatard Penfill**

**100 IU/ml**

**Suspension for injection in cartridge**

**Active ingredient: human insulin 100 IU/ml**

**Inactive ingredients and allergens in this medicine:** See section 6 – "Additional information".

**Read the entire leaflet carefully before you start using this medicine.** This leaflet contains concise information about this medicine. If you have any further questions, consult your doctor or pharmacist.

This medicine has been prescribed for you. Do not pass it on to others. It may harm them, even if it seems to you that their medical condition is similar.

### **1. What is this medicine intended for?**

Insulatard is used to treat diabetes.

**Therapeutic group:** diabetes medicines, intermediate-acting insulins and analogues for injection. Human insulin.

Insulatard is human insulin with a gradual onset and long duration of action. It is used to reduce high blood sugar level in patients with diabetes.

Diabetes is a disease where your body does not produce enough insulin to control the level of your blood sugar. Treatment with Insulatard helps to prevent complications from your diabetes.

Insulatard will start to lower your blood sugar about one and a half hours after you inject it, and the effect will last for about 24 hours. Insulatard is often given in combination with fast-acting insulin products.

### **2. Before using this medicine**

**Do not use this medicine:**

- |   |
|---|
| <ul style="list-style-type: none"><li>▶ if you are sensitive (allergic) to human insulin or to any of the other ingredients in this medicine (see section 6, "Additional information").</li></ul> |
|---|
- ▶ If you suspect hypoglycaemia (low blood sugar) is starting, see "Summary of serious and very common side effects" in section 4.
  - ▶ in insulin infusion pumps
  - ▶ if the cartridge or the device containing the cartridge is dropped, damaged or crushed
  - ▶ if the medicine has not been stored correctly or if it has frozen, see section 5

- ▶ if the insulin does not appear uniformly white and cloudy after resuspension.
- If any of these apply, do not use Insulatard. Ask your doctor, pharmacist or nurse for advice.

### **Before using this medicine**

- ▶ Check the label to make sure it is the right type of insulin.
- ▶ With each use, check the cartridge, including the rubber plunger at the bottom of the cartridge. Do not use it if any damage is seen or if the rubber plunger has been drawn above the white label band at the bottom of the cartridge. This could be the result of an insulin leakage. If you suspect that the cartridge is damaged, take it back to the medicine supplier. See your injection pen manual for further instructions.
- ▶ Always use a new needle for each injection to prevent contamination.
- ▶ Do not share needles and your Insulatard Penfill.
- ▶ Insulatard Penfill is only suitable for injecting under the skin using a reusable injection pen. Speak to your doctor if you need to inject your insulin by another method.

### **Special warnings about using this medicine**

Some conditions and activities can affect your need for insulin. **Before using Insulatard, tell your doctor if:**

- ▶ you have problems with your kidneys, liver or with your adrenal, pituitary or thyroid glands
- ▶ you exercise more than usual or if you want to change your usual diet, because these changes may affect your blood sugar level
- ▶ you are ill; carry on taking your insulin and consult your doctor
- ▶ you are going abroad; travelling over time zones may affect your insulin needs and the timing of injections.

### **Skin changes at the injection site**

The injection site should be rotated to help prevent changes to the fatty tissue under the skin, such as skin thickening, skin shrinking or lumps under the skin. The insulin may not work very well if you inject into a lumpy, shrunken or thickened area (see section 3). Tell your doctor if you notice any skin changes at the injection site. Tell your doctor if you are currently injecting into these affected skin areas before you start injecting in a different area. Your doctor may tell you to check your blood sugar more closely, and to adjust your insulin or other antidiabetic medications dose.

### **Use in special groups**

If you have reduced kidney or liver function, or if you are over 65 years old, you need to check your blood sugar more regularly and discuss changes in your insulin dose with your doctor.

### **Use in children and adolescents**

Insulatard can be used in children and adolescents.

### **Interaction with other medicines**

**If you are taking or have recently taken other medicines, including nonprescription medications and dietary supplements, tell your doctor or pharmacist.** Some medicines affect your blood sugar level and this may mean that your insulin dose has to change. Listed below are the most common medicines which may affect your insulin treatment.

Your blood sugar level may fall (hypoglycaemia) if you take:

- other medicines for the treatment of diabetes

- monoamine oxidase inhibitors (MAOI) (used to treat depression)
- beta-blockers (used to treat high blood pressure)
- angiotensin converting enzyme (ACE) inhibitors (used to treat certain heart problems or high blood pressure)
- salicylates (used to relieve pain and lower fever)
- anabolic steroids (such as testosterone)
- sulphonamides (used to treat infections).

Your blood sugar level may rise (hyperglycaemia) if you take:

- oral contraceptives (birth control pills)
- thiazides (used to treat high blood pressure or fluid retention)
- glucocorticoids (such as "cortisone", used to treat inflammation)
- thyroid hormone (used to treat thyroid gland problems)
- sympathomimetics (such as epinephrine [adrenaline], salbutamol or terbutaline used to treat asthma)
- growth hormone (medicine for stimulating skeletal and somatic growth which has a pronounced influence on the body's metabolic processes)
- danazol (medicine that affects ovulation).

Octreotide and lanreotide (used to treat acromegaly, a rare hormonal disorder that usually occurs in middle-aged adults, caused by the pituitary gland producing excess growth hormone) may either increase or decrease your blood sugar level.

Beta-blockers (used to treat high blood pressure) may weaken or entirely suppress the first warning symptoms which help you recognize low blood sugar.

Pioglitazone (tablets used to treat type 2 diabetes)

Some patients with long-standing type 2 diabetes who also have heart disease or a previous stroke, and who were treated with pioglitazone and insulin developed heart failure. Inform your doctor as soon as possible if you experience signs of heart failure such as unusual shortness of breath or rapid increase in weight or localized swelling (oedema).

If you have taken any of the medicines listed here, tell your doctor, pharmacist, or nurse.

**Using this medicine and alcohol consumption**

- ▶ Drinking alcohol may change your need for insulin because your blood sugar level may either rise or fall. Careful monitoring of your blood sugar level is recommended.

**Pregnancy, breastfeeding, and fertility**

- ▶ If you are pregnant, think you may be pregnant or are planning to have a baby, ask your doctor for advice before taking this medicine. Insulatard can be used during pregnancy. Your insulin dose may need to be changed during pregnancy and after delivery. Careful control of your diabetes, particularly prevention of hypoglycaemia, is important for the health of your baby.
- ▶ There are no restrictions on treatment with Insulatard during breastfeeding.

Ask your doctor, pharmacist, or nurse for advice before taking this medicine, during pregnancy and breastfeeding.

### **Driving and using machines**

- ▶ Ask your doctor whether you may drive a car or operate a machine, if:
  - you have frequent hypoglycaemia
  - you find it hard to recognize hypoglycaemia.

If your blood sugar is low or high, it might affect your concentration and ability to react and therefore also your ability to drive or operate machines. Bear in mind that you could endanger yourself or others.

### **Important information about some of this medicine's ingredients**

Insulatard contains less than 1 mmol sodium (23 mg) per dose, which means that Insulatard is considered 'sodium-free'.

## **3. How to use this medicine?**

### **Dose and when to take your insulin**

Always use this medicine according to your doctor's instructions. Check with your doctor or pharmacist if you are not sure about your dose and about how to take this medicine.

Only your doctor will determine your dose and how you should take this medicine.

**Do not exceed the recommended dose.**

Do not change your insulin medicine unless your doctor tells you to. If your doctor told you to switch from one type or brand of insulin to another, your dose may have to be adjusted by your doctor.

### **How and where to inject this medicine**

Insulatard is given by injection under the skin (subcutaneously). Never inject directly into a vein (intravenously) or muscle (intramuscularly).

Insulatard Penfill is only suitable for injecting under the skin using a reusable injection pen. Speak to your doctor if you need to inject your insulin by another method.

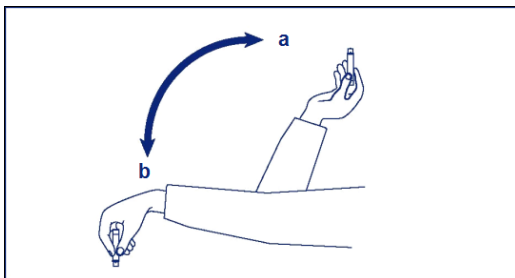
With each injection, change the injection site within the particular area of skin that you use. Being careful about this may reduce your risk of developing lumps or skin pitting - see section 4. The best places to give yourself an injection are: the front of your waist (abdomen); your buttocks; the front of your thighs or upper arms. The insulin will work more quickly if you inject around the waist (abdomen). Be sure to measure your blood sugar regularly.

- ▶ Do not refill the cartridge. When it is empty, you must discard it.
- ▶ Penfill cartridges that contain Insulatard are designed to be used with Novo Nordisk insulin delivery systems and NovoFine® or NovoTwist® needles.
- ▶ If you are treated with Insulatard Penfill and another insulin in a Penfill cartridge, you should use two insulin delivery systems, one for each type of insulin.
- ▶ Always carry a spare Penfill cartridge in case the one in use is lost or damaged.

### **Resuspending Insulatard**

Always check if there is enough insulin left (at least 12 units) in the cartridge to allow even resuspension. If there is not enough insulin left, use a new cartridge. See your injection pen manual for further instructions.

- ▶ **Every time you use a new Insulatard cartridge** (before you put the cartridge into the insulin delivery system):
  - Let the insulin reach room temperature before you use it. This makes it easier to resuspend.
  - Move the cartridge up and down from position **a** to position **b** and back (see the picture) so that the glass ball moves from one end of the cartridge to the other at least 20 times.
  - Repeat this movement at least 10 times before each injection.
  - With each use, repeat the movement until the liquid appears uniformly white and cloudy.
  - Complete the remaining stages of injection without delay.



### **How to inject Insulatard**

- ▶ Inject the insulin under your skin. Use the injection technique that your doctor or nurse taught you, and which is described in your injection pen manual.
- ▶ Keep the needle under your skin for at least 6 seconds. Keep the injection button fully depressed until the needle has been withdrawn from the skin. This will ensure correct injection and limit possible flow of blood into the needle or insulin reservoir.
- ▶ After each injection, be sure to remove and discard the needle and store Insulatard without a needle attached, otherwise the liquid may leak out, which can cause inaccurate dosing.

### **If you have accidentally taken a higher dose**

If you inject too much insulin, your blood sugar will get too low (hypoglycaemia). See “Summary of serious and very common side effects” in section 4.

If a child has accidentally taken from this medicine, immediately see a doctor or go to a hospital emergency room and bring the medicine package with you.

### **If you forget to take this medicine**

If you forget to take your insulin, your blood sugar may get too high (hyperglycaemia), see “Effects from diabetes” in section 4. If you forget to take this medicine at the scheduled time, do not take a double dose.

Adhere to the treatment as recommended by your doctor.

Even if your health improves, do not stop taking this medicine without consulting your doctor.

### **If you stop taking this medicine**

Do not stop taking this medicine without first consulting a doctor who will tell you what needs to be done. Stopping this treatment could lead to very high blood sugar (severe hyperglycaemia) and ketoacidosis. See “Effects from diabetes” in section 4.

**Do not take medicines in the dark! Check the label and dose every time you take medicine. Wear glasses if you need them.**  
**If you have any further questions about using this medicine, consult your doctor or pharmacist.**

#### **4. Side effects**

Like with all medicines, using Insulatard may cause side effects in some users. Do not be alarmed by this list of side effects; you may not experience any of them.

##### **Summary of serious and very common side effects**

**Low blood sugar (hypoglycaemia)** is a very common side effect. It may affect more than 1 in 10 users.

Low blood sugar may occur if you:

- inject too much insulin
- eat too little or miss a meal
- you exercise more than usual
- drink alcohol, see “Using this medicine and alcohol consumption” in section 2.

Signs of low blood sugar: cold sweat; cool pale skin; headache; rapid heartbeat; feeling sick (nausea); feeling very hungry; temporary changes in vision; drowsiness; unusual tiredness and weakness; nervousness or tremor; feeling anxious; feeling confused; difficulty in concentrating.

Severe low blood sugar can lead to unconsciousness. If severe low blood sugar continues for long without being treated, it can cause brain damage (temporary or permanent) and even death. You may recover more quickly from unconsciousness with an injection of the hormone glucagon given by someone who knows how to use it. If you are given a glucagon injection, you will need glucose or a sugar snack as soon as you are conscious. If you do not respond to glucagon treatment, you will have to be treated in a hospital.

What to do if you experience low blood sugar:

- ▶ If you experience low blood sugar, eat glucose tablets or another high sugar snack (such as candy, biscuits, fruit juice). Measure your blood sugar if possible and rest. Always carry glucose tablets or high sugar snacks with you, just in case.
- ▶ When the symptoms of low blood sugar have disappeared or when your blood sugar level has stabilized, continue insulin treatment as usual.
- ▶ If you have such low blood sugar that it makes you pass out, if you have needed an injection of glucagon, or if you have experienced many incidents of low blood sugar, consult a doctor. The amount or timing of insulin, food or exercise may need to be adjusted.

Tell relevant people that you have diabetes and what the consequences may be, including the risk of passing out (becoming unconscious) due to low blood sugar. Let them know that if you pass out, they must turn you on your side and get medical help straight away. They must not give you food or drink because you may choke.

**Serious allergic reaction** (called a systemic allergic reaction) to Insulatard or any of its ingredients is a very rare side effect, but it can potentially be life threatening. It may affect less than 1 in 10,000 users.

**Seek medical advice immediately if:**

- signs of allergy spread to other parts of your body
- you suddenly feel unwell, and you: start sweating; start vomiting; have difficulty in breathing; you get a rapid heartbeat or feel dizzy
- ▶ If you notice any of these signs, seek medical advice immediately.

**Skin changes at the injection site:** If you inject insulin at the same place, the fatty tissue may shrink (lipoatrophy) or thicken (lipohypertrophy) (may affect less than 1 in 100 users). Lumps under the skin may also be caused by build-up of a protein called amyloid (cutaneous amyloidosis; how often this occurs is not known). The insulin may not work very well if you inject into a lumpy, shrunken or thickened area. Change the injection site with each injection to help prevent these skin changes.

**List of other side effects**

**Uncommon side effects** may affect less than 1 in 100 users.

**Signs of allergy:** Local allergic reactions (pain, redness, hives, inflammation, bruising, swelling and itching) at the injection site may occur. These reactions usually disappear after a few weeks of taking your insulin. If they do not disappear, or if they spread throughout your body, see your doctor immediately. See also “Serious allergic reaction”, above.

**Diabetic retinopathy** (an eye disease related to diabetes which can lead to loss of vision): If you have diabetic retinopathy and your blood sugar level improves very fast, the retinopathy may get worse. Talk to your doctor about this.

**Swollen joints:** When you start taking insulin, water retention may cause swelling around your ankles and other joints. Normally, this effect soon disappears. If it does not, contact your doctor.

**Very rare side effects:** may affect less than 1 in 10,000 users.

**Vision problems:** When you first start your insulin treatment, it may disturb your vision, but the disturbance is usually temporary.

**Painful neuropathy** (pain due to nerve damage): If your blood sugar level improves very fast, you may get nerve related pain. This is called acute painful neuropathy and is usually transient.

**Effects from diabetes**

## High blood sugar (hyperglycaemia)

### High blood sugar may occur if you:

- have not injected enough insulin
- forget to take your insulin or stop taking insulin
- repeatedly inject less insulin than you need
- get an infection and/or a fever
- eat more than usual
- exercise less than usual.

### Warning signs of high blood sugar:

The warning signs appear gradually. They include: increased urination; feeling thirsty; losing your appetite; feeling sick (nausea or vomiting); feeling drowsy or tired; flushed, dry skin; dry mouth and a fruity (acetone) smell of the breath.

### What to do if you experience high blood sugar:

- ▶ If you notice any of the above signs: test your blood sugar level, test your urine for ketones if you can, then seek medical advice immediately.
- ▶ These may be signs of a very serious condition called diabetic ketoacidosis (build-up of acid in the blood because the body is breaking down fat instead of sugar). If you do not treat it, this could lead to diabetic coma and eventually death.

**If you experience any side effect, if any side effect gets worse, or if you experience a side effect not mentioned in this leaflet, consult your doctor.**

### **Reporting side effects:**

You can report side effects to the Ministry of Health by following the link “Reporting Side Effects of Drug Treatment” on the Ministry of Health home page ([www.health.gov.il](http://www.health.gov.il)) which links to an online form for reporting side effects. You can also use this link: <https://sideeffects.health.gov.il>

## **5. How to store the medicine?**

- Prevent poisoning! To prevent poisoning, keep this, and all other medicines, in a closed place, out of the reach and sight of children and/or infants. Do not induce vomiting unless explicitly instructed to do so by a doctor.
- Do not use the medicine after the expiry date (exp. date) which is stated on the cartridge label and on the carton. The expiry date refers to the last day of that month.

### Storage conditions

- **Before opening:** Store in a refrigerator at 2°C to 8°C. Keep away from the cooling element. Do not freeze.



- **During use or when a cartridge is carried as a spare:** Do not refrigerate or freeze. You can carry it with you and keep it at room temperature (below 30°C) for up to 6 weeks.
- Always keep the cartridge in the outer carton when you are not using it, in order to protect from light.
- Discard the needle after each injection.
- Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

## **6. Additional information**

### **What Insulatard contains:**

- Insulatard is an isophane (NPH) human insulin suspension. Each ml contains 100 IU of human insulin. Each cartridge contains 300 IU of human insulin in 3 ml suspension for injection.

### **In addition to the active ingredient, this medicine also contains:**

glycerol, disodium phosphate dihydrate, hydrochloric acid, metacresol, phenol, sodium hydroxide, protamine sulphate, zinc and water for injections.

### **What the medicine looks like and contents of the pack**

Insulatard is a suspension for injection. After resuspension, the liquid should be uniformly white and cloudy.

Pack size: 5 cartridges of 3 ml.

The suspension is cloudy, white and aqueous.

### **Registration holder's name and address**

Novo Nordisk Ltd.  
1 Atir Yeda Street  
Kfar-Saba 4464301

### **Manufacturer's name and address**

Novo Nordisk A/S,  
Novo Allé, DK-2880 Bagsværd, Denmark.

This leaflet was revised in December 2020.

Registration number of the medicine in the Ministry of Health's National Drug Registry:  
049-83-26014.