

## **Package leaflet: Information for the user**

### **Propofol 2 % (20 mg/1 ml) Fresenius emulsion for injection or infusion**

#### **Propofol**

**Read all of this leaflet carefully before you are given this medicine because it contains important information for you.**

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

#### **What is in this leaflet:**

1. What Propofol Fresenius is and what it is used for
2. What you need to know before you are given Propofol Fresenius
3. How to use Propofol Fresenius
4. Possible side effects
5. How to store Propofol Fresenius
6. Contents of the pack and other information

#### **1. What Propofol Fresenius is and what it is used for**

Propofol Fresenius belongs to a group of medicines called ‘general anaesthetics’. General anaesthetics are used to cause unconsciousness (sleep) so that surgical operations or other procedures can be performed. They can also be used to sedate you (so that you are sleepy but not completely asleep).

#### **Propofol 2 % (20 mg/1 ml) Fresenius is used to:**

- induce and maintain general anaesthesia in adults and children > 3 years.
- sedate patients > 16 years of age receiving artificial respiration in intensive care.
- sedate adults and children > 3 years during diagnostic and surgical procedures, alone or in combination with local or regional anaesthesia.

#### **2. What you need to know before you are given Propofol Fresenius**

##### **Do not use Propofol Fresenius**

- if you are allergic to propofol or any of the other ingredients of this medicine (listed in section 6).
- if you are allergic to soya or peanut (see “Propofol Fresenius contains soya-bean oil and sodium” at the end of section 2).
- in patients of 16 years of age or younger for sedation in intensive care.

##### **Warnings and precautions**

Talk to your doctor, pharmacist or nurse before you are given Propofol Fresenius and if any of the subsequent mentioned applies to you or applied to you in the past.

You should not receive Propofol Fresenius, or only under extreme caution and intensive monitoring, if you:

- have advanced heart failure
- have any other serious disease of the heart
- are receiving electroconvulsive therapy (ECT, a treatment for psychiatric problems)

In general, Propofol Fresenius should be given with caution to elderly or weak patients.

Before receiving Propofol Fresenius, tell your anaesthetist or intensive care doctor if you have:

- heart disease
- lung disease
- kidney disease
- liver disease
- seizures (epilepsy)
- a raised pressure inside the skull (raised intracranial pressure). In combination with low blood pressure the amount of blood reaching the brain may be decreased.
- altered levels of fat in the blood. If you receiving total parenteral nutrition (feeding through a vein), the levels of fat in your blood must be monitored.
- if your body has lost lots of water (you are hypovolaemic).

If you have any of the following conditions, they must be treated before you receive Propofol Fresenius:

- heart failure
- when there is insufficient blood reaching the tissues (circulatory failure)
- severe breathing problems (respiratory failure)
- dehydration (hypovolaemia)
- seizures (epilepsy)

Propofol Fresenius may increase the risk of

- epileptic seizures
- a nervous reflex that slows the heart rate (vagotonia, bradycardia)
- changes in the blood flow to the organs of the body (haemodynamic effects on the cardiovascular system) if you are overweight and receive high doses of Propofol Fresenius.

Involuntary movements can occur during sedation with Propofol Fresenius. The doctors will take into account how this might affect surgical procedures being performed under sedation and will take the necessary precautions.

Very occasionally, after anaesthesia, there may be a period of unconsciousness associated with stiffness of the muscles. This requires observation by the medical staff but no other treatment. It will resolve spontaneously.

The injection of Propofol Fresenius can be painful. A local anaesthetic can be used to reduce this pain but can have its own side effects.

You will not be allowed to leave the hospital until you are fully awake.

If you are able to go home shortly after receiving propofol you should not go home unaccompanied.

### **Children and adolescents**

The use of Propofol 2 % (20 mg/1 ml) Fresenius is not recommended in children younger than 3 years of age.

Propofol 2 % (20 mg/1 ml) Fresenius must not be given to children and adolescents younger than 16 years of age for sedation in the intensive care unit, since its safety has not been demonstrated in this patient group for this indication.

### **Other medicines and Propofol Fresenius**

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.

In particular, tell your doctor, anaesthetist or nurse if you are taking any of the following medicines:

- Rifampicin (for tuberculosis – TB).
- Midazolam (used to induce sedation (a very relaxed state of calm, drowsiness or sleep) and relieves anxiety and muscle tension).

You must take special care if you are also taking/receiving any of the following medicines:

- Premedications (your anaesthetist will know which medicines can be influenced by Propofol Fresenius)
- Other anaesthetics, including general, regional, local and inhalational anaesthetics (Lower doses of Propofol Fresenius may be required. Your anaesthetist will know this.)
- Painkillers (analgesics)
- Strong painkillers (fentanyl or opioids)
- Parasympatholytic agents (medicines used to treat e.g. painful cramps of organs, asthma or Parkinson's disease)
- Benzodiazepines (medicines used to treat anxiety)
- Suxamethonium (muscle relaxant)
- Drugs that affect many of the internal body functions such as the heart rate, e.g. atropine
- Alcohol containing medicines or beverages
- Neostigmine (medicine used to treat a disease called myasthenia gravis)
- Cyclosporine (medicine used to prevent transplant rejections)
- Valproate (medicine used to treat epilepsy or mental disorders)

### **Propofol Fresenius with food and drink**

After you have been given Propofol Fresenius, you should not eat, drink or consume alcohol until fully recovered.

### **Pregnancy, breast-feeding and fertility**

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.

Propofol Fresenius should not be given to pregnant women unless necessary.

You should stop breast-feeding and discard any breast milk for 24 hours after receiving Propofol Fresenius.

### **Driving and using machines**

After having Propofol you may still feel sleepy for some time. Do not drive or use any tools or machines until you are sure the effects have worn off.

If you are able to go home shortly after receiving Propofol, do not drive a car or go home unaccompanied.

Ask your doctor when you can start doing these activities again and when you can go back to work.

### **Propofol Fresenius contains soya-bean oil and sodium**

Propofol Fresenius contains soya-bean oil. This can rarely cause severe allergic reactions (see "Do not use Propofol Fresenius"). Tell your doctor if you know that you have allergic reactions to soya-bean oil or peanut.

This medicinal product contains less than 1 mmol (23 mg) sodium per 100 ml, i.e. essentially 'sodium-free'.

## **3. How to use Propofol Fresenius**

Propofol Fresenius will only be given to you in hospitals or suitable therapy units by, or under the direct supervision of your anaesthetist or intensive care doctor.

### **Dosage**

The dose you are given will vary depending on your age, body weight and physical condition. The doctor will give the correct dose to start and to sustain anaesthesia or to achieve the required level of sedation by carefully watching your responses and vital signs (pulse, blood pressure, breathing, etc).

You may need several different medicines to keep you asleep or sleepy, free from pain, breathing in a healthy way and to keep your blood pressure steady. The doctor will decide which medicines you need and when you need them.

**Adults**

Most people need 1.5 - 2.5 mg propofol per kg body weight to make them go to sleep (induction of anaesthesia), and then 4 to 12 mg propofol per kg body weight per hour after this to keep them asleep (maintenance of anaesthesia). For sedation, doses of 0.3 to 4.0 mg propofol per kg body weight per hour are usually sufficient.

For sedation during surgical and diagnostic procedures in adults, most patients will require 0.5 - 1 mg propofol per kg body weight over 1 to 5 minutes for onset of sedation. Maintenance of sedation may be accomplished by titrating Propofol Fresenius infusion to the desired level of sedation. Most patients will require 1.5 - 4.5 mg propofol per kg body weight per hour. The infusion may be supplemented by bolus administration of 10 - 20 mg propofol (0.5 - 1 ml Propofol 2 % (20 mg/1 ml) Fresenius) if a rapid increase of the depth of sedation is required.

To provide sedation for ventilated patients older than 16 years of age under intensive care conditions the dose will be adjusted according to the depth of sedation required. Usually satisfactory sedation is achieved by continuous infusion with administration rates in the range of 0.3 to 4.0 mg propofol per kg body weight per hour. Rates of infusion greater than 4.0 mg propofol per kg bodyweight per hour are not recommended.

**Use in children and adolescents over three years of age**

The use of Propofol 2 % (20 mg/1 ml) Fresenius is not recommended in children younger than 3 years of age.

The dose should be adjusted according to age and/or body weight.

Most patients over 8 years of age require approximately 2.5 mg/kg bodyweight Propofol Fresenius to make them go to sleep (induction of anaesthesia). In younger children dose requirements may be higher (2.5 - 4 mg/kg bodyweight).

Rates in the region of 9 - 15 mg/kg/h usually achieve satisfactory anaesthesia to keep them asleep (maintenance of anaesthesia). In younger children dose requirements may be higher.

For sedation during surgical and diagnostic procedures in children over 3 years of age with Propofol 2 % (20 mg/1 ml) Fresenius most paediatric patients require 1 - 2 mg/kg bodyweight propofol for onset of sedation. Maintenance of sedation may be accomplished by titrating Propofol Fresenius infusion to the desired level of sedation. Most patients require 1.5 - 9 mg/kg/h propofol.

Propofol 2 % (20 mg/1 ml) Fresenius must not be given to children and adolescents younger than 16 years of age for sedation in the intensive care unit, since its safety has not been demonstrated in this patient group for this indication.

**Method of administration**

Propofol Fresenius is for intravenous use, usually on the back of your hand or in the forearm. Your anaesthetist may use a needle or cannula (a fine plastic tube). Propofol Fresenius will be injected into a vein either manually or by electric pumps. An electric pump may be used to give the injection for long operations and for use in intensive care.

**Elderly and weak patients**

Elderly and weak patients may require lower doses.

**Duration of treatment**

When used for sedation, Propofol Fresenius must not be administered for more than 7 days.

**If you received more Propofol than you should**

Your doctor will ensure that you receive the right amount of Propofol for you and for the procedure you are undergoing.

However, different people need different doses and if you do receive too much for you, your anaesthetist may need to take measures to make sure your heart and breathing are adequately supported. This is why anaesthetic drugs are only administered by doctors trained in anaesthesia or in the care of patients in intensive care.

If you have any further questions on the use of this medicine, ask your anaesthetist or intensive care doctor.

#### **4. Possible side effects**

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

##### **Side effects that can happen during anaesthesia**

The following side effects can happen during anaesthesia (while the injection is being given to you or when you are sleepy or asleep). Your doctor will be looking out for these. If they happen, your doctor will give you appropriate treatment.

##### ***Very common (may affect more than 1 in 10 people)***

- A feeling of pain at the site of the injection (while the injection is being given, before you fall asleep).

##### ***Common (may affect up to 1 in 10 people)***

- Slow or fast heartbeat
- Low blood pressure
- Changes in your breathing pattern (low respiratory rate, breathing arrest)
- Hiccups
- Cough (may also happen when you wake up)

##### ***Uncommon (may affect up to 1 in 100 people)***

- Swelling and redness or blood clots at the vein along the injection site.

##### ***Rare (may affect up to 1 in 1,000 people)***

- Twitching and shaking of your body, or fits (may also happen when you wake up).

##### ***Very rare (may affect up to 1 in 10, 000 people)***

- Serious allergic reaction which causes difficulty in breathing, swollen and reddened skin, hot flushes
- Build up of fluid in the lungs which can make you very breathless (may also happen when you wake up)
- Unusual colour of urine (may also happen when you wake up).

##### ***Not known (frequency cannot be estimated from the available data)***

- Involuntary movements
- Severe skin and tissue reaction following accidental application beside the vein.
- Prolonged, often painful erection (priapism).

##### **Side effects that can happen after anaesthesia**

The following side effects can happen after anaesthesia (when you are waking up or after you have woken up).

##### ***Common (may affect up to 1 in 10 people)***

- Headache
- Feeling sick (nausea), being sick (vomiting).
- Cough.

##### ***Rare (may affect up to 1 in 1,000 people)***

- Dizziness, chills and sensations of cold
- Excitations

***Very rare (may affect up to 1 in 10,000 people)***

- Being unconscious after the operation (when this has happened, the patients have recovered without problems)
- Inflamed pancreas (pancreatitis) which causes severe stomach pain (a causal relationship could not be shown)
- Fever following surgery

***Not known (frequency cannot be estimated from the available data)***

- Feeling euphoric
- Feeling sexually aroused
- Irregular heart beat
- Changes in ECG (Brugada type ECG)
- Increase in liver size
- Kidney failure
- Breakdown of muscle cells (rhabdomyolysis), increase in acidity of your blood, high potassium and fat levels in your blood, heart failure
- Drug abuse, mostly by healthcare professionals
- Prolonged, often painful erection (priapism).

When Propofol Fresenius is administered in combination with lidocaine (a local anaesthetic used to reduce the pain at the site of injection), certain side effects may occur rarely:

- dizziness
- vomiting
- sleepiness
- fits
- a slowing of the heart rate (bradycardia)
- irregular heartbeat (cardiac arrhythmias)
- shock

**Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via:

**For UK:** The Yellow Card Scheme. Website: [www.mhra.gov.uk/yellowcard](http://www.mhra.gov.uk/yellowcard) or search for MHRA Yellow Card in the Google Play or Apple App Store.

**For Ireland:** The HPRA Pharmacovigilance. Website: [www.hpra.ie](http://www.hpra.ie)

By reporting side effects you can help provide more information on the safety of this medicine.

**5. How to store Propofol Fresenius**

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the ampoule/vial and the outer packaging after EXP. The expiry date refers to the last day of that month.

Do not store above 25 °C.  
Do not freeze.

After opening the product must be used immediately.  
Administration systems with Propofol Fresenius should be replaced 12 hours after opening of the ampoule or vial.

Containers should be shaken before use.

Do not use this medicine if you notice two layers after shaking the emulsion.  
Use only homogeneous preparations and undamaged containers.

For single use only. Any unused emulsion must be discarded.

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. Contents of the pack and other information**

### **What Propofol 2 % (20 mg/1 ml) Fresenius contains**

- The active substance is propofol.  
  
1 ml emulsion contains 20 mg propofol.  
Each 20 ml ampoule contains 400 mg propofol.  
Each 50 ml vial contains 1000 mg propofol.  
Each 100 ml vial contains 2000 mg propofol.
- The other ingredients are refined soya-bean oil, purified egg phosphatides, glycerol, oleic acid, sodium hydroxide, water for injections.

### **What Propofol Fresenius looks like and contents of the pack**

Propofol Fresenius is a white oil-in-water emulsion for injection or infusion.

Propofol Fresenius is available in colourless glass ampoules or glass vials. The glass vials are sealed with rubber stoppers.

#### Pack sizes:

Packs containing 5 glass ampoules with 20 ml emulsion  
Packs containing 1 glass vial with 50 or 100 ml emulsion  
Packs containing 10 glass vials with 50 or 100 ml emulsion

Not all pack sizes may be marketed.

### **Marketing Authorisation Holder and Manufacturer**

#### *For UK:*

*Fresenius Kabi Limited Cestrian Court Eastgate Way  
Manor Park  
Runcorn  
Cheshire  
WA7 1NT  
United Kingdom*

#### *For IE:*

*Fresenius Kabi Deutschland GmbH Else-Kroener Strasse 1,  
61352 Bad Homburg v.d.H, Germany  
Manufacturer:*

Fresenius Kabi Austria GmbH  
Hafnerstraße 36  
A-8055 Graz  
Austria

**This medicinal product is authorised in the Member States of the EEA under the following names:**

<b>Name of the member state</b>	<b>Name of the medicinal product</b>
Germany	Propofol 2% (20mg/1 ml) Fresenius Emulsion zur Injektion oder Infusion
Ireland	Fresenius Propofol 2 %
Portugal	Propofol 2 % Fresenius
Spain	Propofol Fresenius 20 mg/ml emulsión para inyección o perfusión
United Kingdom	Fresenius Propofol 2 %

**This leaflet was last revised in August 2021.**

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**The following information is intended for healthcare professionals only:**

For single use only. Any unused emulsion must be discarded.

Containers should be shaken before use.

If two layers can be seen after shaking the emulsion should not be used.

Use only homogeneous preparations and undamaged containers.

Prior to use, the ampoule neck or rubber membrane should be cleaned using an alcohol spray or a swab dipped in alcohol. After use, tapped containers must be discarded.

Propofol should be given by those trained in anaesthesia (or, where appropriate, doctors trained in the care of patients in Intensive Care).

Patients should be constantly monitored and facilities for maintenance of a patent airway, artificial ventilation, oxygen enrichment and other resuscitative facilities should be readily available at all times. Propofol should not be administered by the person conducting the diagnostic or surgical procedure.

Abuse of, and dependence on propofol, predominantly by health care professionals, have been reported. As with other general anaesthetics, the administration of propofol without airway care may result in fatal respiratory complications.

When propofol is administered for conscious sedation, for surgical and diagnostic procedures, patients should be continually monitored for early signs of hypotension, airway obstruction and oxygen desaturation.

Propofol 2 % (20 mg/1 ml) Fresenius is not advised for general anaesthesia in children younger than 3 years of age since the 2 % strength is difficult to be titrated in small children due to the extremely small volumes needed. The use of Propofol 1 % (10 mg/1 ml) Fresenius should be considered in children between 1 month and 3 years of age if a dose less than e.g. 100 mg/h is expected.

Propofol 2 % (20 mg/1 ml) Fresenius is administered undiluted intravenously by continuous infusion.

Propofol 2 % (20 mg/1 ml) Fresenius must not be mixed with any other solutions for infusion or injection. 5 % w/v Glucose intravenous infusion solution, 0.9 % w/v sodium chloride intravenous infusion solution or 0.18 % w/v sodium chloride and 4 % w/v glucose intravenous infusion solution may be given through the same infusion set.

Co-administration of other medicinal products or fluids added to the Propofol Fresenius infusion line must occur close to the cannula site using a Y-piece connector or a three-way valve.

Propofol Fresenius is a lipid containing emulsion without antimicrobial preservatives and may support rapid growth of microorganisms.



The emulsion must be drawn aseptically into a sterile syringe and giving set immediately after opening the ampoule or breaking the vial seal. Administration must commence without delay.

Asepsis must be maintained for both Propofol Fresenius and the infusion equipment throughout the infusion period. Propofol Fresenius must not be administered through a microbiological filter.

The use of a burette, drop counter, syringe pump or volumetric infusion pump to control the infusion rate is recommended when Propofol Fresenius is infused.

As usual for fat emulsions, the infusion of Propofol Fresenius via one infusion system must not exceed 12 hours. The infusion set for Propofol Fresenius must be changed at least every 12 hours.

To reduce pain on the injection site, Propofol 2 % (20 mg/1 ml) Fresenius should be administered in a larger vein or lidocaine injection solution may be administered before induction of anaesthesia with Propofol 2 % (20 mg/1 ml) Fresenius. Lidocaine must not be used in patients with hereditary acute porphyria.

Muscle relaxants like atracurium and mivacurium should only be administered after flush of the same infusion site used for Propofol Fresenius.