

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

### **SMOFlipid 200 mg/ml, emulsion for infusion**

Soya-bean oil, medium chain triglycerides, olive oil, fish oil

**Read all of this leaflet carefully before you start using 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 or nurse.
- If you get any side effects, talk to your doctor or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

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

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

#### **1. What SMOFlipid is and what it is used for**

SMOFlipid contains four different lipids (fats); soya-bean oil, medium chain triglycerides, olive oil and fish oil which is rich in omega-3 fatty acids. The liquid is a mixture of fats and water which is called a 'lipid emulsion'.

- It works by providing energy and fatty acids for your body
- It is put into your blood by a drip or an infusion pump

A health care professional will give you SMOFlipid when other forms of feeding are not good enough or have not worked.

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

##### **You should not be given SMOFlipid:**

- if you are allergic to soya-bean oil, medium-chain triglycerides, olive oil, fish oil or any of the other ingredients of this medicine (listed in section 6).
- if you are allergic (hypersensitive) to any other products containing fish, egg, soy or peanut.
- if you have too much fat in the blood (called 'severe hyperlipemia').
- if you have serious kidney or liver problems.
- if you have severe blood clotting problems (called 'coagulation disorders').
- if you are in acute shock.
- if you have fluid in the lungs (called 'pulmonary oedema'), too much body fluid (called 'hyperhydration') or have heart failure (due to too much body fluid).
- if you are in an unstable condition, for example shortly after serious injury, heart attack, stroke, blood clot (thrombosis), metabolic acidosis (metabolic disturbance which results in high acid levels in the blood), or untreated diabetes, blood poisoning and dehydration.

#### **Warnings and precautions**

Talk to your doctor or nurse before having this medicine if you have a problem with high levels of lipids in the blood due to that your body cannot use fat properly (called 'impaired lipid metabolism').

When used in neonates and children below 2 years, the solution (in bags and administration sets) should be protected from light exposure until administration is completed. Exposure of SMOFlipid to ambient light, especially after admixtures with trace elements and/or vitamins, generates peroxides and other degradation products that can be reduced by protection from light exposure.

### **Allergic reactions**

If you have an allergic reaction while having SMOFlipid, it needs to be stopped straight away. Tell the doctor or nurse straight away if you get any of the following while you are having the infusion:

- fever (high temperature)
- shivering
- rash
- difficulty breathing

### **Children**

Talk to your doctor or nurse if this medicine is being given to your newborn child and they have:

- too much of a substance called “bilirubin” in their blood (hyperbilirubinemia)
- a high pressure in their lungs (pulmonary hypertension)

If your newborn child has SMOFlipid for a long time the doctor will take blood tests to see how it is working.

### **Other medicines and SMOFlipid**

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

In particular, tell your doctor if you are taking or have recently taken drugs used to stop blood clotting, such as warfarin and heparin.

- SMOFlipid naturally contains vitamin K<sub>1</sub>, which can affect warfarin. However, the vitamin K<sub>1</sub> content in SMOFlipid is so low that such problems are unlikely.
- Heparin given in clinical doses may at first cause higher levels of fatty acids in the blood due to liberation of fatty acids from the tissues into the bloodstream and then less fatty acids are removed from your blood (decreased triglyceride clearance).

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

It is not known whether it is safe to have SMOFlipid while you are pregnant or breast-feeding. If you need to have direct feeding into your vein during pregnancy or breast-feeding, your doctor will give you SMOFlipid only after careful consideration.

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor for advice before you are given this medicine.

### **Driving and using machines**

Not relevant as the medicine is given at the hospital.

### **SMOFlipid contains sodium**

This medicinal product contains 5 mmol (115 mg) sodium per 1000 ml. To be taken into consideration by patients on a controlled sodium diet.

## **3. How you are given SMOFlipid**

SMOFlipid is put into your blood by a drip or an infusion pump. Your doctor will decide your dose depending on your body weight and your ability to utilise the amount of fat infused.

When used in neonates and children below 2 years, the solution (in bags and administration sets) should be protected from light exposure until administration is completed (see section 2).

For medical and health care professionals, please see “Method of administration” at the end of this leaflet for more details regarding dosage and administration.

### **If you are given more SMOFlipid than you should**

In case the dose SMOFlipid given to you is too high, there is a risk of taking in more fat than your body can handle. This is called ‘fat overload syndrome’. See section 4, Possible side effects, for more information.

#### 4. Possible side effects

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

##### **Fat overload syndrome**

This might happen when your body has problems using fat, because of having too much SMOFlipid. It may also happen because of a sudden change in your condition (such as kidney problems or infection). The fat overload syndrome is characterized by high levels of fat in the blood (hyperlipidemia), fever, more fat in your tissues than normal (fat infiltration) and disorders in various organs of the body and coma. All symptoms will usually disappear when you stop having the infusion.

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

- slight rise in body temperature

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

- shivering
- loss of appetite
- feeling sick (nausea)
- being sick (vomiting)

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

- allergic reactions (e.g. high temperature, swelling, lowering of blood pressure, skin rash, redness, headache)
- feelings of hot and cold
- paleness
- bluish discolouration of skin and mucous membranes (due to reduced oxygen content in the blood)
- pains in neck, back, bones, chest and lower back
- raised or lowered blood pressure
- shortness of breath

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

- prolonged and convulsive erection in men

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

If you notice any side effects, please tell your doctor 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. You can also report side effects directly (see details below). By reporting side effects you can help provide more information on the safety of this medicine.

For the UK: you can report side effects directly via the Yellow card Scheme

[www.mhra.gov.uk/yellowcard](http://www.mhra.gov.uk/yellowcard)

For Ireland:

You can also report side effects directly via

HPRA Pharmacovigilance,

Earlsfort Terrace,

IRL - Dublin 2;

Tel: +353 1 6764971;

Fax: +353 1 6762517.

Website: <http://www.hpra.ie>

E-mail: [medsafety@hpra.ie](mailto:medsafety@hpra.ie)

#### 5. How to store SMOFlipid

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

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

Do not use SMOFlipid after the expiry date which is stated on the label after EXP. The expiry date refers to the last day of that month.

Do not use SMOFlipid if you notice that the package is damaged. Use only if the solution is white and homogenous. For single use only. Any unused product should be thrown away. Do not re-use it.

When used in neonates and children below 2 years, the solution (in bags and administration sets) should be protected from light exposure until administration is completed (see section 2).

## 6. Contents of the pack and other information

### What SMOFlipid contains

- the active substances are
  - Refined soya-bean oil 60 mg/ml
  - Medium-chain triglycerides 60 mg/ml
  - Refined olive oil 50 mg/ml
  - Fish oil, rich in omega-3 fatty acids 30 mg/ml
- The other ingredients are
  - Glycerol
  - Egg lecithin
  - All-*rac*- $\alpha$ -tocopherol (vitamin E)
  - Water for injections
  - Sodium hydroxide (pH adjustment)
  - Sodium oleate

### What SMOFlipid looks like and contents of the pack

SMOFlipid is a white, homogenous emulsion and is available in glass bottles or plastic bags.

#### Package sizes

<u>Glass bottle</u>	<u>Plastic bag</u>
100 ml	100 ml
10x100 ml	10x100 ml, 20x100 ml
250 ml	250 ml
10x250 ml	10x250 ml
500 ml	500 ml
10x500 ml	12x500 ml
	1000 ml
	6x1000 ml

Not all package sizes may be marketed.

### Marketing Authorisation Holder and Manufacturer

Marketing Authorisation Holder:

MAH for UK:  
Fresenius Kabi Limited  
Cestrian Court, Eastgate Way  
Manor Park, Runcorn, Cheshire  
WA7 1NT  
UK

MAH for IRL:  
Fresenius Kabi Deutschland GmbH  
Else-Kröner-Straße 1,  
61352 Bad Homburg  
v.d.Höhe  
Germany

Manufacturer:  
Fresenius Kabi Austria GmbH, A-8055 Graz, Austria (glass bottles)

For any information about this medicinal product, please contact the local representative of the Marketing Authorisation Holder:

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

Austria, Belgium, Finland, France, Germany, Iceland, Ireland, Italy, Netherlands, Norway, Slovenia, Sweden, United Kingdom: SMOFlipid 200 mg/ml

Cyprus, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Luxembourg, Spain: SMOFlipid 20%

Denmark, Poland, Portugal, Slovakia: SMOFlipid

**This leaflet was last revised in**

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The following information is intended for healthcare professionals only:

**Warnings and precautions**

The concentration of triglycerides in serum should not exceed 3 mmol/l during infusion. An overdose may lead to fat overload syndrome. Special caution should be taken in patients with a marked risk for hyperlipidemia (e.g. patients with high lipid dosage, severe sepsis and extremely low birth weight infants).

Administration of medium-chain fatty acids alone can result in metabolic acidosis. This risk is to a great extent eliminated by the simultaneous infusion of the long chain fatty acids included in SMOFlipid. Concomitant administration of carbohydrates will further eliminate this risk. Hence, simultaneous infusion of carbohydrate or a carbohydrate-containing amino acid solution is recommended. Laboratory test generally associated with monitoring of intravenous nutrition should be checked regularly. These include blood glucose levels, liver functions tests, acid base metabolism, fluid balance, full blood count and electrolytes.

This medicinal product contains soya-bean oil, fish oil and egg phospholipids, which may rarely cause allergic reactions. Cross allergic reaction has been observed between soya-bean and peanut.

Any sign or symptom of anaphylactic reaction (such as fever, shivering, rash or dyspnoea) should lead to immediate interruption of the infusion.

SMOFlipid should be given with caution to neonates and prematures with hyperbilirubinemia and cases with pulmonary hypertension. In neonates, particularly prematures on long term parenteral nutrition, blood platelet counts, liver function tests and serum triglycerides should be monitored.

SMOFlipid contains up to 5 mmol sodium per 1000 ml. To be taken into consideration by patients on a controlled sodium diet.

The addition of other medicaments or substances to SMOFlipid should generally be avoided unless compatibility is known.

**Method of administration**

Intravenous infusion into a peripheral or central vein.

When used in neonates and children below 2 years, the solution (in bags and administration sets) should be protected from light exposure until administration is completed.

**Instructions for use and handling*****Special warnings and precautions for use***

Use only if the emulsion is homogeneous.

Light exposure of solutions for intravenous parenteral nutrition, especially after admixture with trace elements and/or vitamins, may have adverse effects on clinical outcome in neonates, due to generation of peroxides and other degradation products. When used in neonates and children below 2 years, Smoflipid should be protected from ambient light until administration is completed.

Infusion bag: The integrity indicator (Oxalert) should be inspected before removing the over-pouch. If the indicator is black, oxygen has penetrated the over-pouch and the product should be discarded. Inspect the emulsion visually for phase separation prior to administration. Ensure that the final emulsion for infusion does not show any evidence of phase separation. For single use only. Any unused emulsion should be discarded.

*Additives:* SMOFlipid may be aseptically admixed with amino acid, glucose, and electrolyte solutions to produce "All-In-One" Total Parenteral Nutrition (TPN) admixtures. Compatibility for different additives and the storage time of the different admixtures will be available upon request from the marketing authorisation holder. Additions should be made aseptically. Any mixture remaining after infusion must be discarded.

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

**Storage after mixing**

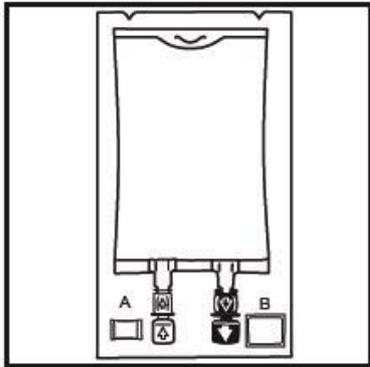
If additions are made to SMOFlipid, the admixtures should be used immediately from a microbiological point of view. If admixtures are not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at 2-8°C, unless additions have taken place in controlled and validated aseptic conditions.

***Special precautions for disposal and other handling***

When used in neonates and children below 2 years, protect from light exposure, until administration is completed. Exposure of Smoflipid to ambient light, especially after admixtures with trace elements and/or vitamins, generates peroxides and other degradation products that can be reduced by protection from light exposure.

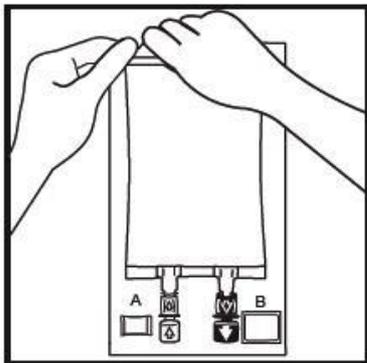
## Instructions for use – applicable for the infusion bag

1.



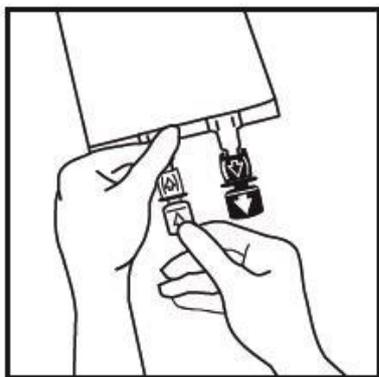
1. The integrity indicator (Oxalert) (A) should be inspected before removing the overpouch. If the indicator is black the overpouch is damaged and the product should be discarded.

2.



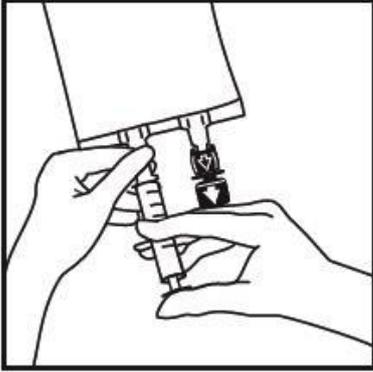
2. Remove the overwrap by tearing at the notch and pulling down along the container. The Oxalert sachet (A) and the oxygen absorber (B) should be disposed.

3.



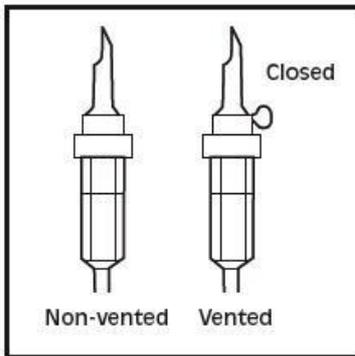
3. If no additives are to be used go to figure 5. If additives are to be used, break off the tamper-evident arrow flag from the white additive port.

4.



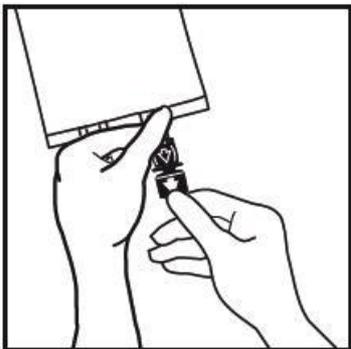
4. Take the syringe containing the additives. Hold the base of the additive port. Insert the needle horizontally through the centre of the septum of the additive port and inject the additives (with known compatibility). Use syringes with needles of 18 – 23 gauge and length of max. 40 mm

5.



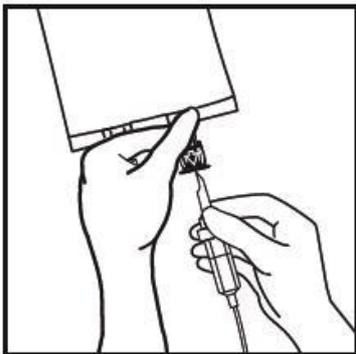
5. Use a non-vented infusion set or close the air vent on a vented set. Follow the instructions for use for the infusion set. Use a spike with diameter as specified in ISO 8536-4, 5.6 +/- 0.1 mm.

6.



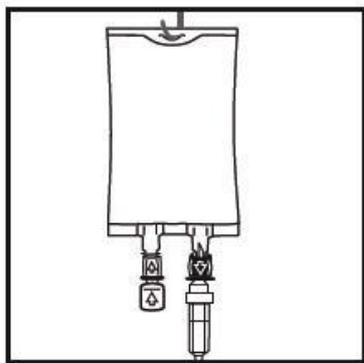
6. Break off the tamper-evident arrow flag from the blue infusion port.

7.



7. Hold the base of the infusion port. Insert the spike through the infusion port, by rotating your wrist slightly until the spike is inserted,

8.



8. Hang the bag in the hanger cut and start infusion.