

## **NAME OF THE MEDICINAL PRODUCT**

Lipoplus 200 mg/ml emulsion for infusion

## **COMPOSITION**

1000 ml of emulsion contains:

Medium-chain triglycerides	100.0 g
Soya-bean oil, refined	80.0 g
Omega-3-acid triglycerides	20.0 g

Content of triglycerides 200 mg/ml (20%)

Content of essential fatty acids

Linoleic acid (omega-6) 38.4 - 46.4 g/l

Alpha-linolenic acid (omega-3) 4.0 - 8.8 g/l

Eicosapentaenoic acid and  
docosahexaenoic acid (omega-3) 8.6 - 17.2 g/l

Excipient with known effect: 1000 ml emulsion contains 2.6 mmol sodium (as sodium hydroxide and sodium oleate).

Excipients: Egg phospholipids for injection, glycerol, sodium oleate, all-rac- $\alpha$  Tocopherol, sodium hydroxide (for pH adjustment), water for injections.

## **THERAPEUTIC INDICATIONS**

Supply of energy, including a readily utilisable lipid component (medium-chain triglycerides) and essential omega-6 fatty acids and omega-3 fatty acids, as part of parenteral nutrition when oral or enteral nutrition is impossible, insufficient or contraindicated.

Lipoplus is indicated in adults, preterm and term neonates, infants and toddlers, children and adolescents.

## **CONTRAINDICATIONS**

Hypersensitivity to the active substances, to egg, fish, peanut or soya protein or to any of the excipients.

Severe hyperlipidaemia characterised by hypertriglyceridaemia ( $\geq 1000$  mg/dl or 11.4 mmol/l); severe coagulopathy; intrahepatic cholestasis; severe hepatic insufficiency; severe renal insufficiency in absence of renal replacement therapy; acute thromboembolic events; fat embolism; acidosis.

General contraindications to parenteral nutrition include unstable circulatory status with vital threat (states of collapse and shock); acute phases of cardiac infarction or stroke; unstable metabolic conditions (e.g. decompensated diabetes mellitus, severe sepsis, coma of unknown origin); inadequate cellular oxygen supply; disturbances of the electrolyte and fluid balance; acute pulmonary oedema; decompensated cardiac insufficiency.

## **UNDESIRABLE EFFECTS**

The following listing includes a number of systemic adverse reactions that may be associated with the use of Lipoplus. Under the conditions of correct use, in terms of dosing, monitoring, observation of safety restrictions and instructions, most of them are very rare (<1/10 000).

Undesirable effects are listed according to their frequencies as follows:

Rare: ( $\geq 1/10\ 000$  to  $< 1/1000$ )

Very rare: ( $<1/10\ 000$ )

Not known: (cannot be estimated from the available data)

### **Blood and lymphatic system disorders**

Very rare: Hypercoagulation

Not known: Leucopenia, thrombocytopenia

### **Immune system disorders**

Very rare: Allergic reactions (e.g. anaphylactic reactions, dermal eruptions, laryngeal, oral and facial oedema)

### **Metabolism and nutrition disorders**

Very rare: Hyperlipidaemia, metabolic acidosis. The frequency of these adverse reactions is dose dependent and may be higher under conditions of absolute or relative overdose

Very rare: Hyperglycaemia

### **Nervous system disorders**

Very rare: Headache, drowsiness

### **Vascular disorders**

Very rare: Hypertension or hypotension, flush

### **Respiratory, thoracic and mediastinal disorders**

Very rare: Dyspnoea, cyanosis

### **Gastrointestinal disorders**

Very rare: Nausea, vomiting, loss of appetite

### **Skin and subcutaneous tissue disorders**

Very rare: Erythema, sweating

Hepatobiliary disorders

Not known: Cholestasis

### **Musculoskeletal and connective tissue disorders**

Rare: Back, bones, chest and lumbar region pain

### **General disorders and administration site conditions**

Very rare: Elevated body temperature, feeling cold, chills, fat overload syndrome (see below)

Should adverse reactions occur, the infusion must be stopped.

Should the triglyceride level rise to above 11.4 mmol/l (1000 mg/dl) during infusion, the infusion must be stopped. With levels above 4.6 mmol/l (400 mg/dl), the infusion may be continued at a reduced dosage.

If the infusion is restarted, the patient should be carefully monitored, especially at the beginning, and serum triglycerides should be determined at short intervals.

### **Information on particular undesirable effects**

Nausea, vomiting and lack of appetite are symptoms often related to conditions for which parenteral nutrition is indicated, and may be associated with parenteral nutrition at the same time.

#### **Fat overload syndrome**

Impaired capacity to eliminate triglycerides can lead to "fat overload syndrome" which may be caused by overdose. Possible signs of metabolic overload must be observed. The cause may be genetic (individually different metabolism) or the fat metabolism may be affected by ongoing or previous diseases. This syndrome may also appear during severe hypertriglyceridaemia, even at the recommended infusion rate, and in association with a sudden change in the patient's clinical condition, such as renal function impairment or infection. The fat overload syndrome is characterised by hyperlipidaemia, fever, fat infiltration, hepatomegaly with or without icterus, splenomegaly, anaemia, leucopenia, thrombocytopenia, coagulation disorder, haemolysis and reticulocytosis, abnormal liver function tests and coma. The symptoms are usually reversible if the infusion of the fat emulsion is discontinued.

Should signs of a fat overload syndrome occur, the infusion of Lipoplus must be discontinued immediately.

### **WARNINGS**

Keep out of the sight and reach of children. For single use only. Any unused emulsion should be discarded.

### **NOTE**

Prescription only

Not all products are registered and approved for sale in all countries or regions. Indications of use may also vary by country and region. Please contact your country representative for product availability and information.

**B. Braun Melsungen AG, 34212 Melsungen, Germany, 09/2023**