SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

Ospolot 20 mg/ml oral suspension

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

1 ml oral suspension contains 20 mg sulthiame.

Excipients with known effect:

Each ml contains 2.3 mg of sodium methyl parahydroxybenzoate (E219) and 0.6 mg of sodium propyl parahydroxybenzoate (E217), 0.0026 mg of fructose, 0.0024 mg of glucose, 0.0005 mg of sucrose and 0.000004 mg of sulphur dioxide.

For the full list of excipients, see section 6.1

3 PHARMACEUTICAL FORM

Oral suspension

White suspension.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

For treatment of Rolandic epilepsy (benign childhood epilepsy with centrotemporal spikes).

Note:

Treatment with Ospolot should only be conducted by a paediatric neurologist with sufficient experience in treating epilepsy.

There is limited evidence from controlled clinical trials on the efficacy and safety of Ospolot. Prior to starting treatment with sulthiame, a thorough differential diagnostic procedure regarding other types of childhood epilepsies is indicated. Rolandic epilepsies demonstrate a high percentage of spontaneous remissions – even without drug treatment – and usually show a favourable course of disease and a good prognosis.

4.2 Posology and method of administration

Posology

The dose must be established and monitored by the doctor on an individual basis. The maintenance dose is about 5 to 10 mg per kg body weight per day. It should be built up step-wise (tapered in) over a one-week period.
Due to the short half-life of sulthiame, the daily dose should as far as possible be spread over three single doses (see tables 1 and 2 with dosing examples). If the daily dose is spread over the day in this way, constant plasma levels are to be expected after five to six days. Therapeutic plasma concentrations of sulthiame have not yet been determined.

A switch from another medicinal product or from combination treatment should be done gradually.

Paediatric population
Ospolot is suitable for use in children and adolescents weighing 12 kg or more. For dosing examples, refer to tables 1 and 2. However, dose titration must be carried out on an individual basis.

Table 1

Patient-Weight	Build-up dose: **2.5 mg* sulthiame per kg per day**	
	Single dose (given 3 x daily)	**Total daily dose**
12 - 18 kg	**0.5 – 0.75 ml** (equivalent to 10 – 15 mg sulthiame)	1.5 – 2.25 ml (equivalent to 30 – 45 mg sulthiame)
18 - 24 kg	**0.75 – 1.0 ml** (equivalent to 15 – 20 mg sulthiame)	2.25 – 3.0 ml (equivalent to 45 – 60 mg sulthiame)
24 - 30 kg	**1.0 – 1.25 ml** (equivalent to 20 – 25 mg sulthiame)	3.0 – 3.75 ml (equivalent to 60 – 75 mg sulthiame)
30 - 36 kg	**1.25 – 1.5 ml** (equivalent to 25 – 30 mg sulthiame)	3.75 – 4.5 ml (equivalent to 75 – 90 mg sulthiame)
36 – and above	**1.5 ml and above** (equivalent to 30 mg sulthiame and above)	4.5 and above (equivalent to 90 mg sulthiame and above)

*1 ml Ospolot oral suspension contains 20 mg sulthiame => 0.25 ml = 5 mg sulthiame

Table 2

Patient-Weight	Maintenance dose: **5 mg* sulthiame per kg per day**	
	Single dose (given 3 x daily)	**Total daily dose**
12 - 18 kg	**1.0 – 1.5 ml** (equivalent to 20 – 30 mg sulthiame)	3.0 – 4.5 ml (equivalent to 60 – 90 mg sulthiame)
18 - 24 kg	**1.5 – 2.0 ml** (equivalent to 30 – 40 mg sulthiame)	4.5 – 6.0 ml (equivalent to 90 – 120 mg sulthiame)
24 - 30 kg	**2.0 – 2.5 ml** (equivalent to 40 – 50 mg sulthiame)	6.0 – 7.5 ml (equivalent to 120 – 150 mg sulthiame)
30 - 36 kg	**2.5 – 3.0 ml** (equivalent to 50 – 60 mg sulthiame)	7.5 – 9.0 ml (equivalent to 150 – 180 mg sulthiame)
36 – and above	**3.0 ml and above** (equivalent to 60 mg sulthiame and above)	9.0 and above (equivalent to 180 mg sulthiame and above)

*1 ml Ospolot oral suspension contains 20 mg sulthiame => 0.25 ml = 5 mg sulthiame

Duration of treatment

Ospolot should not be discontinued abruptly. A paediatric neurologist experienced in treating epilepsy should decide on the duration of treatment and discontinuation on an individual basis.
If therapy is not successful, treatment with sulthiame should be discontinued after about one to two months.

Method of administration

Ospolot is for oral use.
A graduated 10 ml oral syringe with a corresponding adapter, and instructions for use within the package leaflet, are provided.

Before taking Ospolot, the bottle should be shaken very well (at least once for 30 seconds) and the dose drawn-up immediately afterwards (to avoid sedimentation). The oral suspension may be swallowed directly from the oral syringe, or taken straight after mixing it, preferably with a small volume of water or alternatively with orange juice, milk, yoghurt or wheat porridge. When taking the oral suspension directly from the oral syringe, the patient should drink some water, juice or milk immediately afterwards due to the bitter taste of sulthiame. Ospolot may be taken with or without food but carbonated beverages or hot food should be avoided as these can cause eructation or slowed swallowing. It is preferable that the way Ospolot is taken remains constant during therapy.

The oral suspension may also be administered via a feeding tube that should be flushed with a minimum of 15 ml of water immediately after administration. If this method of administration is used, the dose should be prepared as above immediately before administration.

4.3 Contraindications

- Hypersensitivity to the active substance, other sulphonamides, sodium methyl parahydroxybenzoate (E219), sodium propyl parahydroxybenzoate (E217) or to any of the excipients listed in section 6.1,
- Hyperthyroidism,
- Hypertension,
- Known acute porphyria.

4.4 Special warnings and precautions for use

Sulthiame should not be administered, or only administered with special caution
- in patients with impaired renal function
- in patients with a history of psychiatric disorders.

Laboratory monitoring
It is recommended that blood count, liver enzymes and renal function are measured before starting treatment with Ospolot. They should then be monitored weekly for the first month then at monthly intervals during the first six months. After six months of treatment, two to four checks per year are sufficient.

Note:
Treatment should be discontinued if a persistent increase in creatinine occurs.

Hypersensitivity reactions:
Instructions should be given to seek urgent medical advice if fever, sore throat, allergic skin reactions with lymph node swelling and/or flu-like symptoms occur during treatment with Ospolot. In cases of severe allergic reactions Ospolot must be discontinued immediately.

Progressive thrombocytopenia or leukopenia accompanied by clinical symptoms require discontinuation of Ospolot.

LHON:
In two patients with the inherited Leber hereditary optic neuropathy (LHON), sulthiame was considered a trigger for visual loss.

Suicidal ideation and suicidal behaviour
Suicidal ideation and behaviour have been reported in patients treated with antiepileptic medicinal products in several indications. A meta-analysis of randomised placebo controlled trials of anti-epileptic medicinal products has also shown a small increased risk of suicidal ideation and behaviour. The mechanism of this risk is not known and the available data do not exclude the possibility of an increased risk for sulthiame.

Therefore patients should be monitored for signs of suicidal ideation and behaviours and appropriate treatment should be considered. Patients (and caregivers of patients) should be advised to seek medical advice should signs of suicidal ideation or behaviour emerge.

Excipients
Sodium methyl parahydroxybenzoate (E219) and sodium propyl parahydroxybenzoate (E217) may cause allergic reactions (possibly delayed).

Sulphur dioxide (E 220) may rarely cause severe hypersensitivity reactions and bronchospasm.

This medicine contains glucose, sucrose and 0.0026 mg fructose in each ml. Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrose-isomaltase insufficiency should not take this medicine. Glucose, fructose and sucrose may be harmful to the teeth.

This medicinal product contains less than 1 mmol sodium (23 mg) per ml, that is to say it is essentially “sodium-free”.

4.5 Interaction with other medicinal products and other forms of interaction

Before starting treatment with Ospolot it should be ascertained whether any other medicines are being used, including any obtained ‘over-the-counter’.

Influence of other medicinal products on sulthiame

Primidone
If sulthiame is combined with primidone, the intensity of undesirable effects of sulthiame may increase; especially in children, dizziness, unstable gait and drowsiness may occur.

Carbamazepine
There are indications that sulthiame serum levels may decrease if carbamazepine is taken concomitantly.

Influence of sulthiame on other medicinal products

Phenytoin
If sulthiame is combined with phenytoin, the plasma levels of phenytoin can be markedly elevated. This combination requires especially strict monitoring and frequent controls of phenytoin plasma levels, particularly in the case of impaired renal function.

Lamotrigine
In combination with lamotrigine, an elevation of lamotrigine levels in the blood has also been observed in individual cases. Therefore, lamotrigine levels should be checked more frequently at the beginning of such a treatment.

Clobazam
Concomitant use of sulthiame and clobazam may result in elevated levels of the active metabolite of clobazam. Serum levels should be monitored.

CYP2C19
There is evidence that sulthiame inhibits CYP2C19 enzyme activity. When combining sulthiame with CYP2C19 substrates, serum levels of the substrates should be monitored.

Carboanhydrase-Inhibitors
Concomitant use of sulthiame and other carbonic anhydrase inhibitors (e.g. topiramate, acetazolamide) may increase the risk of undesirable effects due to carbonic anhydrase inhibition (see also section 4.8).

Alcohol
During treatment with sulthiame, the patient should abstain from alcohol. Sulthiame, as a sulphonamide derivative, theoretically may have an effect similar to that of disulfiram. These symptoms include a very unpleasant, although generally self-limiting systemic reaction caused by vasodilatation, with pulsating headache, respiratory depression, nausea, vomiting, tachycardia, hypotension, amblyopia, confusion, shock reactions, arrhythmias, loss of consciousness and seizures. The degree and duration of these symptoms can vary to a great extent.

4.6 Fertility, pregnancy and lactation

Pregnancy

There are no, or limited, data on the use of sulthiame in pregnant women. Animal studies are insufficient with respect to reproductive toxicity, but revealed embryotoxic effects (see section 5.3). Administration of antiepileptics during pregnancy has been generally associated with an increased risk for malformations, which may be increased if different antiepileptics are combined. Therefore, Ospolot is not recommended during pregnancy and in women of childbearing potential not using contraception.

In the case of pregnancy, the lowest seizure-controlling dose of Ospolot should be administered, if possible, as monotherapy. Prenatal diagnostic measures for early detection of malformations (high-resolution ultrasound and alpha-fetoprotein determination) are recommended. In no case should treatment with antiepileptics be discontinued without medical consent, as uncontrolled seizures can have serious consequences for both the mother and the unborn child.

Breastfeeding

It is unknown whether sulthiame or its metabolites are excreted in human milk and a risk to newborns and infants cannot be excluded. Ospolot should not therefore be taken while breast-feeding.

Fertility

There are no data on the effects of sulthiame on fertility.

4.7 Effects on ability to drive and use machines

Even when used as directed, this medicinal product can affect reactions to such an extent - especially at the start of treatment - that the ability to drive a vehicle or use machines may be impaired. This applies to a greater extent in combination with alcohol.

4.8 Undesirable effects

The following frequency categories are used for the evaluation of undesirable effects:

Very common	(≥ 1/10)
Common	(≥ 1/100 to < 1/10)
Uncommon	(≥ 1/1,000 to < 1/100)
Rare	(≥ 1/10,000 to < 1/1,000)
Very rare	(< 1/10,000)
Not known (frequency cannot be estimated from the available data)	

Metabolism and nutrition disorders
Common: weight loss, lack of appetite

Psychiatric disorders
Uncommon: hallucinations, anxiety, lack of drive
Not known: depressive mood/depression, personality change and behavioural anomaly (e.g. aggressiveness, irritability, mood swings), cognitive impairment

Nervous system disorders
Common: paraesthesias in the extremities and in the face*, dizziness, headache
Uncommon: myasthenic phenomena, grand-mal status, increased seizure activity
Not known: polyneuritis

Eye disorders
Common: double vision
Not known: visual impairment, that may be significant

Cardiac disorders
Common: stenocardia, tachycardia

Respiratory, thoracic and mediastinal disorders
Common: tachypnoea*, hyperpnoea*, dyspnoea, hiccups

Gastrointestinal disorders
Very common: gastric complaints like e.g. nausea, vomiting (in about 10% of patients)
Not known: diarrhoea

Hepatobiliary disorders
Not known: hepatotoxic reactions, increase in liver enzymes

Skin and subcutaneous disorders
Not known: Stevens-Johnson syndrome, TEN (toxic epidermal necrolysis)

Musculoskeletal and connective tissue disorders
Uncommon: joint pain

Renal and urinary disorders
Not known: acute renal failure

*Dose-dependent, if necessary the dose should be adjusted.

One patient with long-standing refractory epilepsy experienced progressive weakness of the limbs, hypersalivation, slurred speech, increasing drowsiness up to coma. The symptoms abated within hours of sulthiame being discontinued.

Sulthiame is a carbonic anhydrase inhibitor. Therefore, undesirable effects of carbonic anhydrase inhibition, such as renal stone formation, metabolic acidosis, tiredness/exhaustion, haemodilution and changes in serum electrolyte values (e.g. hypocalcaemia), may occur during administration of sulthiame (see also section 4.5).

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme, website: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Sulthiame has a low toxicity and adults have survived overdoses of 4 to 5 g. Anecdotally, 20 g was reported to be fatal in one case but in another the patient recovered.

Symptoms of overdose

Headache, dizziness, ataxia, impaired consciousness, metabolic acidosis, crystalluria.

Treatment of overdose

No specific antidote is known. Gastric lavage and activated charcoal should be used to minimise absorption and supportive measures should be instigated to maintain vital functions. Sodium bicarbonate can be infused to treat acidosis. Alkalising diuretic therapy is recommended for preventing renal damage and crystalluria.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Other Antiepileptics

ATC code: N03AX03

Sulthiame belongs to the group of carbonic anhydrase inhibitors and displays an anticonvulsant effect in the electroconvulsion test (rat and mouse) and in the convulsion test with pentamethylene tetrazole (mouse).

5.2 Pharmacokinetic properties

Sulthiame pharmacokinetics were not systematically investigated in different age categories in children and adolescents.

Absorption

After oral administration, sulthiame is rapidly and completely absorbed, predominantly from the upper section of the small intestine. Peak plasma concentrations are measured after 1 - 5 hours.

In a single dose pharmacokinetic study with 16 probands, the influence of food intake on the absorption of Ospolot 200 mg tablets was examined. The results show that intake of Ospolot with food leads to a moderately reduced bioavailability of sulthiame.

Distribution

About 29% of the active substance is bound to plasma proteins.

Elimination

80 to 90% is eliminated with the urine and 10 to 20% with the faeces after biliary secretion. Within 24 hours, 32% of the administered dose is excreted unchanged via the kidneys. In a single dose pharmacokinetic study with 16 healthy adult probands, a half-life of approximately 12 h was determined. Based on published pharmacokinetic studies, a shorter half-life is assumed in children.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of repeated dose toxicity.

Mutagenic and carcinogenic potential

Sulthiame did not show any mutagenic potential *in vitro* and *in vivo*. Long-term carcinogenicity studies have not been conducted.

Reproductive toxicity

The reproductive toxicity of sulthiame was insufficiently investigated. In an embryotoxicity study on rats, embryotoxic effects were noted at the lowest tested dose (30 mg/kg/day). Studies regarding effects on fertility and peri- and postnatal development of the off-spring are lacking.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium methyl parahydroxybenzoate (E219)

Sodium propyl parahydroxybenzoate (E217)

Sucralose

Docusate sodium

Xanthan gum

Sodium dihydrogen phosphate dihydrate

Dipotassium phosphate

Strawberry flavour

Sweetness Modulator Flavour (containing fructose, glucose, sucrose, sulphur dioxide (E220)

Masking flavour

Phosphoric acid 85%

Purified water

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

3 years

After first opening: 3 months

6.4 Special precautions for storage

This medicinal product does not require any special storage conditions.

6.5 Nature and contents of container

200 ml or 250 ml oral suspension in an amber glass bottle (type III) with a child resistant closure (polypropylene) in a cardboard box also containing a 10 ml oral syringe, graduated every 0.25 ml (polyethylene, polypropylene) and an adapter for the oral syringe.

Not all pack sizes may be marketed.

6.6 Special precautions for disposal

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7 MARKETING AUTHORISATION HOLDER

Desitin Arzneimittel GmbH
Weg beim Jäger 214
D-22335 Hamburg
Germany

8 MARKETING AUTHORISATION NUMBER(S)

PL 14040/0041

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

06/12/2024

10 DATE OF REVISION OF THE TEXT

06/02/2026