

## **METADOXIL®**

**INTERNATIONAL NON-PROPRIETARY NAME (INN):** Metadoxine

### **DOSAGE FORM AND STRUCTURE:**

#### **Composition (tablets):**

*Active ingredient:* pyridoxine L-2 pyrrolidone 5-carboxylate (metadoxine) 500 mg;

*Excipients:* microcrystalline cellulose, magnesium stearate.

#### **Composition (ampules):**

*Active ingredient:* each 5 ml ampoule contains pyridoxine L-2 pyrrolidone 5-carboxylate (metadoxine) 300 mg;

*Excipients:* sodium metabisulfite, sodium edetate, methyl parahydroxybenzoate, water for injections.

### **DESCRIPTION:**

Metadoxil® tablets are white or almost white, round, biconvex, with a break line on one side and an engraved name of the drug on the other side.

Metadoxil® ampules contain clear and colourless (or with a slight yellowish tint) solution for injections.

**ATC CODE:** N07BB Drugs used in alcohol dependence.

**PHARMACOLOGICAL ACTION:** Hepatoprotection, detoxification, anti-alcohol effect.

### **PHARMACODYNAMICS:**

The hepatoprotective effect of the drug is due to the membrane-stabilizing effect and is based on the ability to restore the ratio of saturated and unsaturated free fatty acids. As a result, the resistance of hepatocytes to the action of lipid peroxidation, which occurs when exposed to various toxic agents, is increased. The detoxifying effect of metadoxine is due to the activation of liver enzymes involved in the metabolism of ethanol (alcohol dehydrogenase and aldehyde dehydrogenase), which accelerates the process of excretion of ethanol and acetaldehyde from the body, and therefore, their toxic effect is reduced. Metadoxine prevents the accumulation of triglycerides in hepatocytes and prevents the formation of fibronectin and collagen, which significantly slows down the formation of cirrhosis. The drug reduces mental and somatic manifestations of the hangover effect and reduces the time to relieve withdrawal symptoms. Metadoxine activates cholinergic and GABAergic neurotransmitter systems, improves ideation and short memory functions, and prevents the occurrence of motor excitation, which is caused by ethanol. Metadoxine has a non-specific antidepressant and anxiolytic effect, and reduces the craving for alcohol.

### **PHARMACOKINETICS:**

**Absorption and distribution:** after an oral administration, the drug is rapidly absorbed from the digestive tract and has high bioavailability (60-80%). Plasma protein binding is 50%.

Metabolism and excretion: the drug is metabolized in the liver into active metabolites - pyridine and pyrrolidone carboxylate. T1/2 for oral or parenteral administration is 40-60 minutes. 45-50% of the drug is excreted in the urine within 24 hours; 35-50% is excreted in feces within 96 hours.

### **INTENDED USES:**

#### **Metadoxil® tablets:**

- Complex therapy of liver diseases, especially of alcohol etiology;
- Chronic alcoholism.

#### **Metadoxil® ampules:**

- Acute alcohol intoxication;
- Alcohol withdrawal syndrome.

### **CONTRAINDICATIONS:**

- Pregnancy;
- Lactation (breastfeeding);
- Hypersensitivity to the drug components.

The drug should be prescribed with caution in case of Parkinson's disease if Levodopa is used at the same time, because metadoxine reduces the effectiveness of the latter.

### **PRECAUTION:**

The solution for injection contains sodium metabisulfite. This substance can cause allergic reactions or an increase in asthma attacks in patients prone to asthmatic attacks (especially in those with bronchial asthma).

### **DOSAGE AND ADMINISTRATION:**

#### **Metadoxil® tablets:**

The drug is prescribed as part of the complex therapy of liver diseases and chronic alcoholism in the amount of 500 mg (1 tablet) 2 times a day 15-30 minutes before meals. The dose can be increased to 1500 mg (3 tablets) per day if necessary. The course of treatment is at least 90 days.

#### **Metadoxil®ampules:**

In acute alcohol intoxication, the drug is administered i/m in the amount of 300-600 mg (5-10 ml) or i/v in the amount of 300-900 mg (5-15 ml) depending on the severity of intoxication. In case of the intravenous mode of administration, the desired dose of the drug is dissolved in 500 ml of saline or in a 5% glucose solution and is administered by drop infusion for 90 minutes.

In case of alcohol withdrawal syndrome the drug is administered i/v in the form of an infusion at a dose of 900 mg (15 ml) 1 time / during 4-7 days, depending on the patient's condition.

### **SIDE EFFECTS:**

Possible: allergic response. Bronchospasm may develop in patients with bronchial asthma (when using an injection). If side effects are manifested, it is recommended to cancel the drug and prescribe maintenance therapy.

### **OVERDOSE:**

Currently no cases of overdose with Metadoxil have been reported.

### **INTERACTION WITH OTHER DRUGS:**

Metadoxil reduces the effectiveness of Levodopa in case of the simultaneous use.

### **PREGNANCY AND LACTATION:**

Contraindicated.

**INFLUENCE ON THE ABILITY TO DRIVE VEHICLES AND OPERATE MECHANISMS:**

The drug has no influence on the ability to drive vehicles.

**STORAGE CONDITIONS:**

Store in a dark place at temperatures up to 25°C (77°F). Keep away from children.

**SHELF LIFE:**

5 years. Do not use after the expiration date.

**MANUFACTURER:**

Doppel Farmaceutici / Laboratoire Baldacci, Italy.