Label/Package leaflet

LOVOSOYA

NPK (SO_3) 5 – 5 – 7.5 (2.5)

EU FERTILISING PRODUCT

Manufacturer: Lovochemie a.s., Terezínská 57, Lovosice, 410 02, Czech Republic
Distributor:
Type designation: PFC 1(C)(I)(b)(ii) Compound liquid inorganic macronutrient fertiliser

Chemical and Physical Properties:

Feature	Value
Total nitrogen as N in wt %	5
Ureic nitrogen as N in wt %	4
Total phosphorus as P_2O_5 in wt %	5
Water - soluble phosphorus as P_2O_5 in wt %	5
Water - soluble potassium as K_2O in wt %	7.5
Water - soluble sulphur as SO_3 in wt %	2.5
Boron as B in wt %, as sodium salt and free acid, water - soluble	0.200
Copper as Cu in wt %, in chelate with EDTA, water - soluble	0.300
Iron as Fe in wt %, in chelate with EDTA, water - soluble	0.300
Manganese as Mn in wt %, in chelate with EDTA, water - soluble	0.500
Molybdenum as Mo in wt %, as sodium salt, water - soluble	0.500
Zinc as Zn in wt %, in chelate with EDTA, water - soluble	0.700
pH of the diluted solution (1 : 5)	6.5 – 8.5
Density in kg/L at 20°C	approx. 1.26

The liquid fertiliser is in solution, dark green in colour, with a low cadmium content.

Contaminant content: the fertiliser meets the contaminant content limits for the type of fertiliser according to Regulation (EU) No. 2019/1009.

Usage:
The fertiliser contains macro and micronutrients in a balanced ratio based on the needs of legumes and is suitable for spray application. After dilution, it is used for continuous fertilisation of soybeans, peas, beans, etc. It is also suitable for fertilising perennial crops of alfalfa and clover. The main focus is on nutrients that support the symbiotic ability of plants and tuber-associated bacteria to fix airborne nitrogen. Great emphasis is placed on trace elements, especially molybdenum. Iron and molybdenum are key components of the enzyme nitrogenase, which allows the fixation of airborne nitrogen. For plants grown on soils with limited iron mobility (neutral and alkaline) and in the first line after liming, as well as with reduced molybdenum availability (acidic or heavier soils), the ability to fix nitrogen without the use of LOVOSOYA may be limited.
The fertiliser also works very well when there is a need to increase the use of mineral nitrogen from the soil in conditions and periods that limit the fixation of airborne nitrogen, i.e. at the beginning of the vegetation (before the formation of root tubers), especially in stands without a "starter" dose of nitrogen before the establishment of the stand; during the vegetation in cooler periods or in wet soils; when a bean plant is grown on the plot for the first time (especially soybean), or a long time after another bean crop.
The nutrients contained in the fertiliser (nitrogen, sulphur, boron, molybdenum, manganese and copper) influence the processes associated with nitrogen uptake (root development – N, B) and its use (nitrogen transformations in plants, activation of the enzyme nitrate reductase – S, Mo, Fe, Cu, Mn). The result is the conversion of nitrate nitrogen into amino acids and their subsequent incorporation into proteins.

Visual deficiencies resemble nitrogen deficiencies, but are caused by improper functioning of the tuber-associated bacteria, often due to a lack of suitable nutrients. LOVOSOYA fertiliser is the recommended product for replenishing these nutrients. For an accurate diagnosis of the nutritional status, we recommend leaf analysis of the plants.

Application:
The basic single dose is 2 – 3 L/ha. Applications can be repeated 2 – 6 times during the growing season depending on nutrient deficiencies and plant acceptance conditions. The fertiliser is applied in the morning or evening. Sensitive cultures run the risk of burns in intense sunlight and high temperatures.
For application to field crops, the recommended fertiliser doses are diluted with 150 – 250 L/ha of water. In the case of application to mature forage crops, the rate may be increased to 5 l/ha and diluted with 300 – 400 L/ha of water.

These doses set out the approximate amount of fertiliser recommended for application for a given crop. Specific doses and total amounts must be specified according to local conditions and applicable legislation. The use of soil and plant analyses or other diagnostic tools is very relevant.

Use only in case of real need. Do not exceed the specified dosage.

Labelling according to Regulation (EC) No. 1272/2008 (CLP):
Hazard symbols:
Not applied.
Signal word:
Not applied.
Standard hazard statements:
Not applied.
Rules for safe handling:
P220 – Keep away from food.
P262 – Avoid contact with eyes, skin or clothing.
P280 – Wear protective gloves, protective clothing and eye protection.
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 – IN CASE OF CONTACT WITH EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 – Get medical advice/attention if you feel unwell.
P501 – Dispose of the packaging and the contents in accordance with local regulations.

A list of all ingredients constituting more than 5 % by weight of the fertiliser:
Potassium hydrogen phosphate CAS 7758-11-4 (CMC 1), urea CAS 57-13-6 (CMC 1), zincdisodium chelatonate (EDTA - $ZnNa_2$) CAS 14025-21-9 (CMC 1), manganese disodium chelatonate (EDTA - $MnNa_2$) CAS 15375-84-5 (CMC 1), potassium thiosulphate CAS 10294-66-3 (CMC 1), potassium dihydrogen phosphate CAS 7778-77-0 (CMC 1), ferricsodium chelatonate (EDTA - FeNa) CAS 15708-41-5 (CMC 1), copperdisodium chelatonate (EDTA - $CuNa_2$) CAS 14025-15-1 (CMC 1)

The fertiliser falls within the scope of Council Directive 91/676/EEC on the protection of waters against pollution caused by nitrates from agricultural sources. The fertiliser contains nitrogen and can therefore be used on a limited basis in vulnerable areas. The fertiliser can be used without restriction in habitats outside the endangered areas.

Fertiliser contains urea, which can release ammonia and affect air quality. Depending on local conditions, appropriate corrective measures should be taken.

Additional or detailed information with regard to safe handling and environmental impact, including first aid instructions, is given in the safety data sheet for the fertiliser in question.

Transport and storage:
The fertilizer is transported in PE containers or other packaging units agreed with the customer. Store in polyethylene or fibreglass bins or containers of the manufacturer. When storing the temperature of the stored product must not drop below + 5°C. Keep out of direct sunlight. Store in a dry and cool place. Keep the containers tightly closed.

Package Volume: 0.5, 1, 5, 10, 20, 600, 1,000 litres and tanks
Shelf Life: 24 months when stored in the original undamaged packaging and under storage conditions
Date of manufacture: