

Catalogue 2025 Knowledge Customer value



Hegmatan Shimi Ariya entered the industry with the aim of producing innovative and diverse agricultural chemical fertilizers. We are interested to employing talented experts and creating, diverse products to support farmers and the agricultural industry Guided by our slogan Knowledge, Innovation, and Customer Value. Hegmatan Shimi Ariya is dedicated to providing exceptional products and service.

Our team of experts has leveraged extensive research and experience to develop a range of powdered, granular, and liquid fertilizers. These products are designed for various application methods, including foliar spraying, fertigation, soil application, and planting hole application. Each fertilizer is carefully formulated to address specific nutritional needs of crops throughout different growth stages. Further details on each product are provided below.

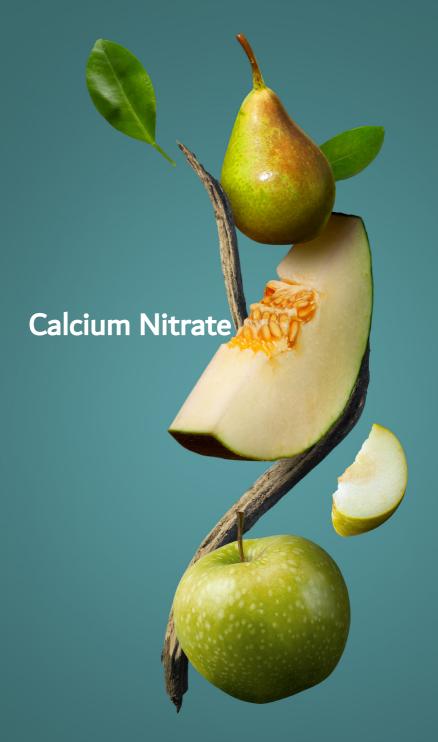




Products List

- Granular Fertilizers
- Powder Fertilizers
- Liquid Fertilizers

Calcium Nitrate 3	
Powder Flake Granules	
Liquid Sulfur6 Potassium_Based calcium_Based nitrogen_Based	
Liquid Thiosulfale	





Rozhin Kood Calcium Nitrate

Calcium nitrate is a water-soluble chemical fertilizer that provides calcium and nitrogen for plants. Nitrogen is a vital nutrient and an essential element for chlorophyll production, which is crucial for photosynthesis in plants. Its adequate supply promotes rapid growth and lushness.

Hegmatan Shimi Ariya, under the brand Rozhin kood offers a wide range of particle sizes of calcium nitrate fertilizers. With %100 water-soluble calcium and nitrogen, it ensures that these vital nutrients are quickly and efficiently available to plants. This fertilizer contains the lowest levels of heavy metals, sodium, and chloride, allowing for use without the concern of harming soil structure or rendering it unproductive.

The nitrogen in Rozhin kood calcium nitrate is in the nitrate form, which leads to rapid absorption by the roots and promotes growth. Additionally, the presence of nitrate enhances the absorption of potassium, calcium, and magnesium by the plant.

A Brief Overview of the Benefits of Calcium Nitrate

- Strengthening plant tissue
- Increasing the shelf life of products
- Strengthening cell walls and increasing plant strength
- Increasing resistance to disease, fungus and bacterial attack
- Resistance to environmental stresses such as heat, drought, salinity and excessive sodium
- Prevention of calcium deficiency symptoms in products such as bruising, rust spots, blossom end rot, softness, etc.
- Improving soil structure
- Improving the absorption of other nutrients





W/W	Guaranteed decomposition
13.07	Minimum total nitrogen (N)
13	Minimum nitrate
18.05	Minimum soluble calcium (Ca)
25.27	Minimum calcium oxide (CaO)
0.01	Minimum sodium (Na)
6	pH of a %10 solution in water





Rozhin Kood Liquid Sulfurs

Sulfur is one of the 17 essential elements required by plants, ranking fourth after the primary nutrients: nitrogen, phosphorus, and potassium. Without exception, all plants require this element for their growth and development. Today, due to the scarcity of sulfur resources and environmental regulations aimed at preventing sulfur emissions, the necessity for sulfur-containing fertilizers has increased significantly. Additionally, the insolubility of powdered sulfur in water, its phytotoxic effects, the waste associated with it—especially during windy conditions—and the challenges in handling and applying powdered sulfur compared to liquid sulfur have contributed to the growing popularity of liquid sulfur.

Liquid sulfur has a higher absorption rate and solubility, whereas a significant portion of powdered sulfur that does not dissolve can enter the environment, causing pollution and eventually returning to us through the food chain. Hegmatan Shimi Ariya produces liquid sulfur based on three bases: potassium, calcium, and nitrogen. These liquid sulfurs are formulated for maximum efficacy at minimal cost to support our esteemed farmers.

A Brief Overview of the Benefits of Liquid Sulfur

- Providing the Required Sulfur for Soil and PlantsIncreasing yield and improving the quality of agricultural products
- Pest repellent
- Amending soil structure
- Enhancing the absorption of elements present in the soil and minimizing the use of other fertilizers
- Controlling diseases such as powdery mildew, leaf rust, and potato scab
- Increasing the resistance of plants and trees to cold stress
- Increasing protein and oil content in oilseeds
- Enhancing the nutritional value of forage for livestock feeding



W/W%	W/V%	Guaranteed decomposition	sed
11.1	12.66	Potassium (K2O)	n_Ba
14.45	16.49	Total sulfur (S)	ssiur
13.73	15.66	Elemental sulfur (S)	Pota

W/W%	W/V%	Guaranteed decomposition	pe
4.70	5.56	Calcium (CaO)	Base
14.89	17.61	Total sulfur (S)	calcium
37.17	43.96	Sulfite (SO3)	calc

W/W%	W/V%	Guaranteed decomposition	ed
7.02	8.42	total nitrogen (N)	Base
14.39	17.10	Total sulfur (S)	itrogen
35.90	42.68	Sulfite (SO3)	nitro



Rozhin Kood Liquid Thiosulfates

Thiosulfates serve as a rich and unique source of sulfur, influencing the physical and chemical properties of soil. They help reduce soil acidity and ultimately increase the solubility of micronutrients in the soil. Hegmatan Shimi Ariya produces liquid thiosulfates based on three bases: potassium, calcium, and ammonium.

Potassium Thiosulfate plays a fundamental role in the metabolism of proteins and carbohydrates, the control and activation of various enzymes, the acceleration of meristematic tissue growth, and the regulation of stomatal and water relations.

Calcium Thiosulfate helps reduce soil salinity or sodium levels, with the calcium it contains assisting in better leaching and dissolution of sodium.

Ammonium Thiosulfate is an excellent source of ammoniacal nitrogen that provides essential elements to plants over a longer duration, preventing nitrogen oxidation and enhancing its uptake.

A Brief Overview of the Benefits of Liquid Thiosulfate

- Chlorine-free, suitable for use on plants sensitive to chlorine
- Anti-salinity and saline soil amendment
- Increases soil permeability
- More effective product for controlling fungal diseases, powdery mildew, and sucking pests like mites and thrips due to containing one more sulfur ion compared to sulfates.
- Improves the taste, color and shelf life of the plant
- Increases resistance to cold and drought stress



W/W%	W/V%	Guaranteed decomposition	Ilfate
25.7	36.2	Potassium	thiosu
18	25.4	Total sulfur (S)	sium
36.8	51.88	Thiosulfate (S ₂ O ₃)	Potas

W/W%	W/V%	Guaranteed decomposition	fate
6	7.5	Calcium (CaO)	liosul
10	12.5	Total sulfur (S)	um t
17.5	21.88	Thiosulfate (S ₂ O ₃)	Calci

W/W%	W/V%	Guaranteed decomposition	Ifate
10.63	13.30	Nitrogen in ammonium (NH4)	thiosu
11.42	14.86	Total sulfur (S)	onium
20	26.95	Thiosulfate (S ₂ O ₃)	Amm



