



SPECIAL-S TECHNOLOGY IS REVOLUTIONIZING ELEMENTAL SULPHUR FERTILIZERS

Shell Thiogro's newest technology, Special-S, makes it simple and cost-effective to produce a high sulphur, urea-based fertilizer that is helping to change the way the industry thinks about this type of product and what it can offer.

Sample Grade: 11-0-0-75ES

DID YOU KNOW?

ONE TONNE OF SPECIAL-S CONTAINS ALMOST DOUBLE THE NUTRIENTS OF A TONNE OF AMMONIUM SULPHATE. THIS MEANS THAT MORE NUTRIENTS CAN MOVE THROUGH THE SUPPLY CHAIN AT A LOWER COST, CREATING SAVINGS IN TRANSPORTATION, STORAGE AND APPLICATION.

WHY PRODUCE SPECIAL-S?

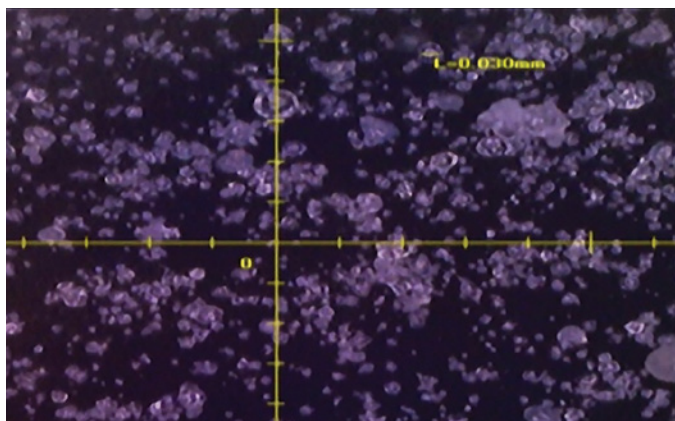
- **Differentiate your offer** – this specialist product enables fertilizer producers to stand out in a competitive market.
- **Boost your profits** – producers can realize a higher return on their sulphur by diversifying with a sulphur fertilizer.

WHO IS IT SUITABLE FOR?

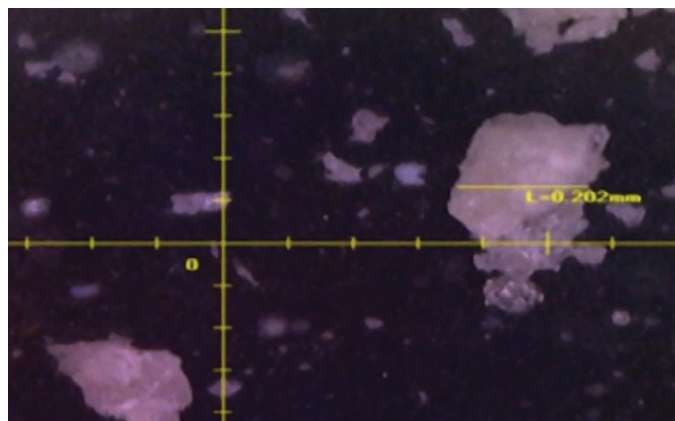
Small to mid-size fertilizer producers looking to expand their product portfolio with high value products, or sulphur producers interested in establishing an alternative revenue stream for their elemental sulphur.

HOW IT DELIVERS

Special-S includes Shell's patented process for micronization of elemental sulphur. The result is a high-performing, differentiated product that addresses many of the nutrient availability challenges growers face today.



Digital microscope image of Special-S (11-0-0-75ES) showing average particle size of 30 microns.



Digital microscope image of sulphur bentonite (0-0-0-90ES) showing particle size of >100 microns.



SPECIAL-S IS PROVEN IN THE FIELD

By dramatically reducing the particle size of elemental sulphur, Special-S technology improves sulphur availability, ensuring a reliable supply across the growing cycle and delivering higher yields.

Using Special-S as the sulphur source resulted in an average 11% yield increase*

UP TO

40%

YIELD INCREASE IN **CORN***

UP TO

18%

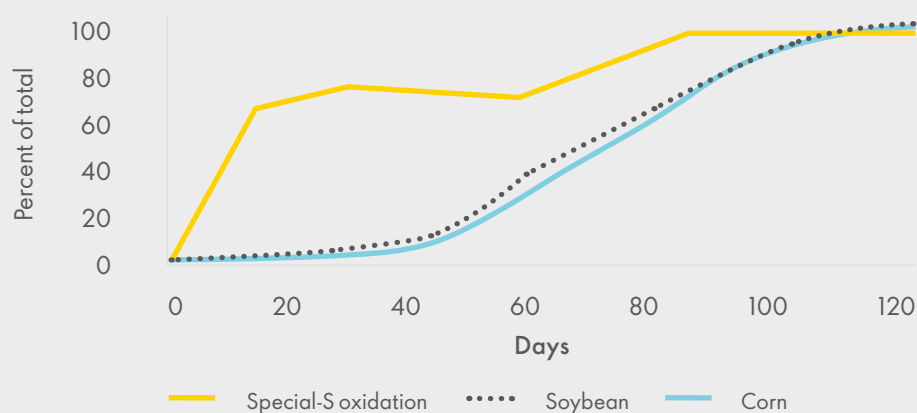
YIELD INCREASE IN **SOYBEAN***

These agronomy results are based on field trials carried out in Canada, the United States, Argentina, Pakistan and Kenya, with Special-S being tested on canola, corn, soybean and rice. Using scientific protocols, nutrients were balanced across all trials and all products (with the exception of a control which received no sulphur).

*Compared to the control.

AN ELEMENTAL SULPHUR SOURCE THAT CAN MATCH UPTAKE

Special-S: sulphur oxidation and sulphur crop uptake versus time



Source: Shell/IPNI

Note: The elemental sulphur to sulphate oxidation rate was measured using PRS probes in a controlled climatic environment to test the availability potential of Special-S.

EASY TO HANDLE AND APPLY

- Blends well with other fertilizer inputs
- Low dust compared to other elemental sulphur products
- Suitable for spring application
- Can be applied with the seed (low salt index)