



Borregaard



BINDERS FOR QUALITY FERTILIZER GRANULES

WHY USE BORREGAARD'S BINDERS?

- High granule strength and durability at low dosage rates
- Low attrition of final granules
- High-quality binder to facilitate consistent production
- High on-size granules and lower circulating loads for optimal production rates
- Improved storability and material handling
- Quick breakdown after application
- Good binder availability and supply consistency
- Sustainable raw material and approved for organic use

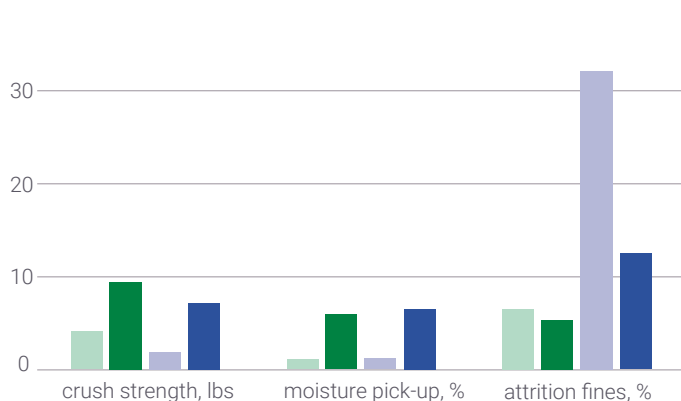
WHAT ARE BORREGAARD'S BINDERS?

- Bio-based and sustainable
- OMRI listed for organic use
- High carbon content in the product (~50%)
- Available in powder and liquid form
- Chemically stable, not corrosive to tanks and pumps
- Available in Calcium, Sodium and Ammonium form
- Agonomically beneficial

HOW DO BORREGAARD'S PRODUCTS PERFORM?

A Borregaard binder and a commonly used molasses were compared at two dosage rates using three performance parameters. The products were evaluated in both limestone and gypsum. Results show that Borregaard's binder produced better granule/pellet hardness and reduced dusting from attrition with both materials.

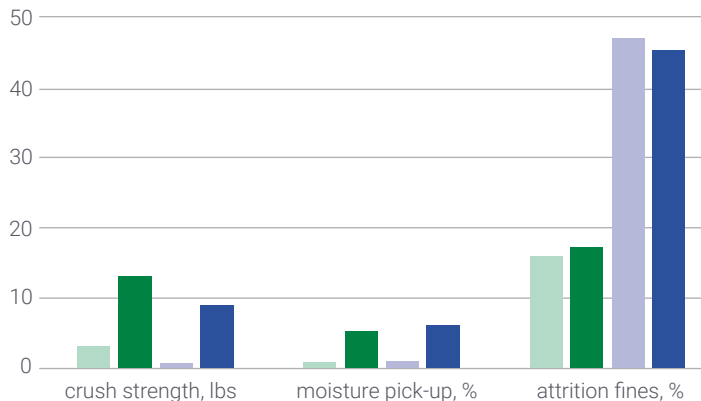
PERFORMANCE IN LIMESTONE



2,5% Borregaard binder

5,0% Borregaard binder

PERFORMANCE IN GYPSUM



2,5% Molasses

5,0% Molasses

WHO IS BORREGAARD?

Borregaard is a world leader and global manufacturer, renowned for its extensive experience and expertise in the granulation and agglomeration markets, which it has been supplying for over 50 years. We have multiple production facilities and storage locations, ensuring efficient and reliable distribution. With global sales support and local inventory available in select markets, we ensure prompt and responsive service to meet the needs of our customers. Additionally, as an ISO 9001 certified producer, Borregaard upholds the highest standards of quality and consistency in all its operations, reinforcing its commitment to excellence in the industry.

USE AND ADDITION GUIDELINES

Fertilizer	Function	Typical Dosage (%)
Granular Limestone	Binder	3-10
Granular Gypsum	Binder	3-10
Ammonium Sulfate	Binder	0.1-1
K-Mag	Binder	3-5
Potash	Binder	0.5-5
Sulfur/Sulfur Mixes	Binder/Dust suppressant	0.5-5
GTSP	Hardener/Dust suppressant	0.2-5
Dical	Hardener/Dust suppressant/Granulation Aid	0.2-0.5
Organic Fertilizer	Binder	1-5
Liquid Fertilizer	Dispersant	0.2-1