INTREPID Trio®

Turfgrass

Naturally Balanced Nutrition in Every Granule

Experience higher yields and balanced fertility in turfgrass by providing the right nutrients at the right rate, right time, and right place for maximum return. Intrepid Trio is natural langbeinite, a unique mineral with three essential nutrients comprised of 21.5-22% potassium (K_20), 10.5-10.8% magnesium (Mg) and 21-22% sulfur (S) as sulfates, depending on grade.

Intrepid Trio, also known as Sulfate of Potash Magnesia, allows growers to apply an extremely low chloride potassium (less than 1.0-3.0% Cl depending on grade) and neutral pH fertilizer with the benefit of sulfur and magnesium in the same ratio in each granule. Intrepid Trio is also OMRI Listed and approved for organic farming.

Available in premium, granular and standard grades, Intrepid Trio blends well with other fertilizer materials for an even distribution of nutrients.

When should Intrepid Trio® be applied?

Apply Intrepid Trio throughout the year per local university recommendations. Applications can be particularly beneficial prior to heavy weather related stress periods in the Summer and Winter.

MLSN* Minimum threshholds for turfgrass management

Maintain pH	>5.5
Potassium (K)	37 ppm
Phosphorus (P)	21 ppm
Calcium (Ca)	331 ppm
Magnesium (Mg)	47 ppm
Sulfur (as sulfate) (SO_4)	7 ppm

*MLSN - Mimium level of sustained nutrition

(Source: Meentemeyer and Whitlark 2016)

OMRI LISTED For Organic Use

REGISTERED cdfa ORGANIC INPUT MATERIAL

INTREPID
1001 17th Street, Suite 1050 | Denver, CO 80202
www.intrepidpotash.com

INTREPID MADE & MANUFACTURED USA

INTREPID Essential Minerals for Success

How does potassium (K_2O) affect turfgrass?

Potassium plays an important role in the health of turfgrass through helping to alleviate stress, aid in stomatal regulation, and maintain turgor potential. Potassium's role as a regulator nutrient in turfgrass helps it to weather salinity, stressful temperature variations, drought, and withstand wear tolerance on golf course greens and tee boxes.

Intrepid Trio is an ideal K source for turfgrass as well in that due to its low salt content it isn't as apt to burn the grass. Potassium deficiencies on turfgrass will typically occur on sandy, low CEC soils with a pH of <5.5. Continued use of heavy N fertilizers without a K source can also create a K deficiency. When determining K needs in turf applications, tissue analysis may be more accurate than soil analysis.

What effect does magnesium (Mg) have on turfgrass?

Magnesium plays an important role in photosynthesis as the center of the chlorophyll molecule and acts in enzyme reactions forming proteins. Low levels of Mg in turfgrass can inhibit protein synthesis which makes the plant more susceptible to weather stress, disease, and pests.

Magnesium deficiencies on turfgrass occur most often sandy soils with low CEC's and pH. Heavy calcium and potassium fertilizer applications without an Mg source can also create a deficiency. Additionally excessive irrigation of turfgrass cause Mg ions to leach out. Applying a balanced fertilizer like Intrepid Trio with both K, Mg, and S in each granule will keep turfgrass supplied with the key cations K and Mg while also including immediately available sulfur.

Why is sulfur (S) included in the Intrepid Trio® mixture?

Sulfur is an essential part of vitamins, hormones, and proteins within a plant. Sulfur deficiency occurs most often on sandy soils. Sulfur can leach out very easily which on turfgrass makes it particularly susceptible because of the regular irrigation used. Intrepid Trio provides sulfur in the sulfate form which is immediately available and pH neutral causing no acidifying effect to the soil.

When will Intrepid Trio® be available to turfgrass?

Intrepid Trio readily dissolves in the soil slowly, reducing the risk of leaching and providing long-lasting nutrients that are immediately available to the plant.

Intrepid Trio provides three essential minerals readily available as your crop needs them.

Factors that increase wear tolerance of Hybrid bermudagrass and Seashore paspalum

Factor	Hybrid bermudagrass	Seashore paspalum
Higher K shoot concentration*	Yes	Yes
Higher shoot moisture*	Yes	Yes
Reduced TCW content*	Yes	Yes
Greater shoot density	Yes	Yes

*Factors influenced by K fertility

Source: Trenholm et. al. 2001

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