

In the past, there have been some misconceptions about sports field conditioners. The following definition of terms and clarification of product characteristics have been developed based on significant research to help you make informed decisions about which products will work best on your baseball and sports turf fields.

### What are the most important characteristics to look for in a soil conditioning product?

1. **Know your mineral.** What is the base material of the product? Minerals perform differently. Does the mineral's inherent characteristics enhance field conditions?
2. **Absorption.** Have the characteristics of the mineral been optimized for maximum absorption?
3. **Color.** Will the product help you meet the standards for a good-looking field? For example, on a baseball field a deeper red color provides maximum visual contrast for the white ball.
4. **Liquid Holding Capacity.** LHC measures the internal pore volume of a mineral. What sort of capacity to absorb and retain moisture does the product have?
5. **Stability.** Will the product resist breakdown and deliver long-lasting performance?
6. **Absence of Dust.** Will the product apply cleanly and not blow away with the first breeze or blow into an infielder's face?

### What type of product meets these criteria?

The physical and chemical makeup of a mineral will directly impact its performance as a soil conditioner. The best mineral for sports turf applications is montmorillonite clay. The internal pore size of montmorillonite is very small. This creates surface tension that absorbs and holds water tightly. Other minerals either do not absorb as much or do not hold water as tightly.

### What are Pro's Choice® soil conditioners made from?

Pro's Choice Red, Select, Plus, and Rapid Dry® are granular products made from unique deposits of montmorillonite clay found in northern Mississippi and southern Illinois. Pro's Choice soil conditioners are the highest quality products in their class, a result of extensive research, development and a quality manufacturing process.

### How are these products optimized to enhance their sports field conditioner qualities?

Pro's Choice products are thermally optimized to remove all moisture from the montmorillonite clay. This transforms the clay into a hard, ceramic-like product. It fixes (or case hardens) the crystalline structure, optimizing the absorptivity of the pores and permanently hardening the granules. When thermally optimized, Pro's Choice montmorillonite absorbs and exchanges moisture in the soil. Also, because it has been case hardened, it is physically stable and will not break down in the field. In other words, thermal optimizing montmorillonite enhances it for sports field applications.

### Are other soil conditioners thermally optimized?

They can be. Thermal optimizing is a manufacturing process ideal for montmorillonite. The term refers to the level of thermal treatment applied in processing. It enhances the hardness and stability of montmorillonite without compromising its porosity, making it a perfect soil conditioner. Thermal optimizing other minerals may or may not enhance them for sports fields.

### What makes Pro's Choice thermally optimized products different from other montmorillonite products?

Pro's Choice is the only manufacturer who produces soil conditioners utilizing a seven-step process. The absorbent clay is mined, sized, dried, ground into specific particle sizes, dried again, thermally optimized and de-dusted. This process is unique to Pro's Choice and ensures the highest quality products on the market today. Because 100% of granules are ground and sized prior to the thermal optimizing processes, each granule receives the full benefit of thermal optimization. In other processes, they dry the clay before it is ground. This results in the surface being at a less than optimal moisture level, which means lower liquid holding capacities and lower absorptivity.

**Are there other important differences?**

Yes. The de-dusting process and the deep, red color set Pro's Choice products apart. If the dust has not been removed from the product, you lose part of what you pay for at the first sign of wind. You also run the risk of the product blowing back in the face of your players. That's why we process every bag of Pro's Choice using our state-of-the-art airswept technology. The deep red color is inherent to unique Pro's Choice mineral deposits. It is then enhanced even more by the proprietary manufacturing process.

**What does vitrified mean?**

Vitrification is a thermal process that involves higher temperatures than thermal optimizing and transforms minerals into a hard, glass-like material. Vitrification is not optimal for montmorillonite. It wastes heat and can destroy porosity. Vitrification may be optimal for other minerals, but none with the excellent sports turf attributes of montmorillonite.

**Since the vitrification process is hotter, does that make it better than thermal optimizing?**

Again, you have to know what mineral is being used. Vitrifying a montmorillonite clay will not provide any benefits. In fact, important performance characteristics such as absorption and the holding and releasing of moisture will be seriously degraded if higher vitrification temperatures are used with montmorillonite clay. Many minerals that are vitrified do not absorb as well as thermally optimized montmorillonite.

**Is vitrification used in sports field products?**

Yes, but the mineral that is vitrified lacks the absorbent characteristics of montmorillonite.

**How can I tell the difference between vitrified clay and thermally optimized montmorillonite?**

Easy, put a handful of both products on a plate or on your field right next to each other. Pour water in a puddle between the two products and watch the montmorillonite clay pull water away from the other material. The thermally optimized montmorillonite clay has a much stronger affinity for water due to its extensive network of small, thirsty pores.

**Who has the most experience in manufacturing products for the sports field market?**

Oil-Dri Corporation of America, the parent company of Pro's Choice, is the largest manufacturer of absorbent clay products in the world. Oil-Dri has been manufacturing absorbent clay products since 1941 and has pioneered products for the sports field industry for over 40 years. Its state-of-the-art research facility in Vernon Hills, Illinois, performs on-going tests to ensure that its soil conditioners deliver the highest quality sports field products in the industry.

**What do professional groundskeepers use on their Major League ballfields?**

A large percentage of the Major League groundskeepers choose Pro's Choice products to maintain their fields. In fact, many of the most of the recent World Series champions have used Pro's Choice soil conditioners and other Pro's Choice sports field products in their ballparks. Pro's Choice products are also great for college, municipal parks and little league fields.

*If you have more questions about quality sports field products, we have the answers. Call us for more in-depth research material on soil conditioners and the minerals from which they're made – 800-648-1166.*

