

SECOND QUARTER 2009

CALCIUM

Feed-grade calcium products are available in a wide variety of particle sizes, from liquid suspendable products to large particle products for laying hen diets.

DICALCIUM PHOSPHATE

Both 18.5% and 21% phosphorus products are available.

SODIUM BENTONITE

Bentonite products are available in a wide variety of particle sizes suitable for any purpose.

POTASSIUM

ILC Resources has both potassium chloride (KCl) and potassium magnesium sulfate (K/Mg/S) available.

All products are available in both bag and bulk.

For additional information
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Safe Products from ILC Resources

What is ILC Resources doing to make sure their mineral products are safe? Never before have we seen as much concern over the safety of all segments of the human food chain. Where does that chain begin? Where does it end? What role does ILC Resources play in this continuum? We'll examine ILC's function in food safety, but let's start by exploring concerns over food in general.

Is the food we eat safe? Just what does **safe** mean to begin with? Webster gives one definition as "free from damage, danger, etc." Another is simply summed up by the word *trustworthy*.

In the United States many of us have simply *trusted* that food is *safe* to eat. By and large modern history seems to justify this belief. As an example, we buy apples and maybe run one under water before eating it or just simply bite into it without any adverse reaction. It must be safe to eat. Similar faith in the safety of most foods is inherent in our society. Certainly, we need to take reasonable precaution and properly prepare our foods, especially involving cooking, but we have enjoyed trouble-free food consumption for many, many years without much exception. This has held true for the most part whether eating at home or out at a restaurant.

Recently that unflappable trust in the safety of our nation's food supply has come under suspicion and skepticism. Mounting incidents demonstrating to the contrary have occurred in our vegetables and meats and other foods. We've really always expected our food to be safe, but doubts real or imagined have us *demanding* the safety of our food supplies. Not only that, but we are seeking reassurances and verification that what we eat is safe. Much media attention and governmental focus is being directed towards this.

The daunting task of knowing for certain the food we eat will be safe for us and our families is an extremely complex issue. The enormity of this undertaking may appear insurmountable if we try to grasp its entirety, but maybe we can gain a measure of understanding by looking at segments and how they fit together.

Food from plant sources are grown in the soil. Food from animal sources such as meat, eggs and milk are grown in various environments from confinement to free range. Upon reaching maturity these food sources are harvested and processed into the food we eat. Before harvesting, of course, both plants and animals need proper

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care and nourishment. Soils must be worked to provide adequate texture and nutrients to optimize plant growth. Managing conditions to meet the proper needs of livestock and poultry are necessary for animal food sources to reach maturity and be harvested unspoiled.

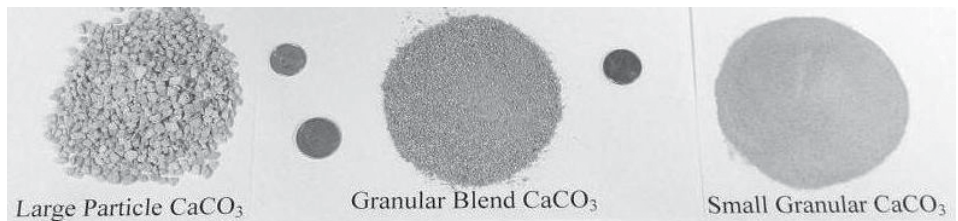
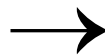
Harvested food sources must be safely transported to sites for processing, converting raw sources into finished food products. Finished food products are further transported to marketing sites where consumers buy them to eat.

First, plant and animal growing conditions need to be safe. Necessary nutritional inputs and nurturing care must safely be rendered to ensure healthy, uncontaminated food sources for harvesting. Transportation and handling from harvest to processing must be safe and uncontaminated. Processing of food sources into finished food products must be contaminant free and harmless. Additional transportation and handling of finished food products to the consumer must be safe. Storage, handling, and preparation of finished products prior to presentation for eating must also be safe. There are multitudinous steps from sprouting or birthing of food sources to culmination of food being eaten. Every facet along the way must responsibly do its part in providing for the safety of *food sources* in order to end up as *safe food*.

In small, yet extremely important measures, ILC is holding up its end in this process. Just what is ILC's "end in this process?" For 85 years, ILC Resources has provided mineral ingredients to meet the nutritional needs of livestock and poultry; most notably supplying feed-grade calcium carbonate (CaCO_3) to meet supplemental *calcium* requirements. For over half that time span, we've also marketed other mineral ingredients such as feed-grade phosphates and bentonite clays. Later we included potassium products and occasionally other products as well. In today's world of consolidations, mergers and buyouts along with bankruptcies and business failures, our record stands as a strong testament to sustained success. Building a sound reputable company was a commitment established by the founding people of Iowa Limestone Company. The people of today's ILC Resources continue to maintain that fundamental commitment. One of the basic tenets practiced at ILC Resources is consistently providing safe, unadulterated products.

High calcitic limestone is harvested on site from rock deposits created some 350,000,000 years ago. Ancient crinoidal marine life thrived for roughly 35,000,000 years, resulting in sedimentation of skeletal remains forming rich deposits high in calcium carbonate. Nature provides this raw substance that ILC Resources harvests and processes into specific gradation CaCO_3 products ranging from coarse particles to small granules to finely ground powder products of minimum 95% purity.

At ILC Resources, calcitic limestone rock is mechanically crushed, dried to less than 0.5% H_2O , ground further, screened, separated according to particle size, and stored. No chemicals or additives are added during processing. Gradation products are conveyed for both bagging and placement in warehouse to await shipment or conveyed for bulk loading of customers orders. The entire process within the plant is a closed system precluding contamination during processing. Heat from the drying



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process drives off surface moisture and eliminates possible hazardous pathogens. As an inorganic mineral ingredient, CaCO₃ does not support such hazardous risks as mycotoxins – mold, bacteria, etc. Further, inorganic CaCO₃ does not attract insect or rodent activity as a source of food.

Consequently, pesticides are not used, thus minimizing these contamination concerns.

Harvested limestone rock runs 95% minimum CaCO₃. The other 5% at most is made up of background levels of other elements from the rock's origins in antiquity. Product testing verifies minimum concerns regarding heavy metals. Closed processing minimizes exposure with any industrial lubricants. Calcitic limestone deposits are generally recognized as safe regarding dioxin/PCB tolerance issues. Test results verify dioxin/PCB safety.

Two additional risk areas pose potential hazards to product safety. One has to do with FDA's Title 21 CFR 589.2000. This is the BSE Feed rule which prohibits contamination of ruminant feeds with any *restricted use protein products* (RUPP). The only potential risk of contamination to ILC products would be if any RUPP material is contained in vessels presented at our facilities for loading our products. At ILC Resources' facilities procedural measures are taken to minimize risk of contaminations. If visual contamination is observed, the vessel is refused loading until verified safe. The *BSE Feed rule* states that safe material intro-

duced to contamination in a receiving vessel is the same as simply loading *contaminated* product. Thus, measures are taken to minimize this very risk. A second area of potential hazard to product safety lies with receiving incoming mineral ingredients for further marketing. Procedures are taken to visually observe material before unloading and samples are collected for visual inspection and testing. Incoming mineral ingredients are prevented from mingling with CaCO₃ products by segregated storage and separate dedicated conveyance for either bagging or for bulk loadout.

To a greater extent, however, reliance on respective supplier's procedures and integrity to maintain their product safety is paramount to ILC Resources taking custody of incoming material for further marketing. Once again, food sources to finished food are a chain with many links. Each link has primary responsibility for its own segment. The only way complete product safety can be achieved is if all the links in the chain successfully maintain the integrity of products while in their custody.

Another important consideration of providing safe ingredients to customers is the transportation of products. A number of years ago ILC Resources committed to offer delivery of product to customers. Today a fleet of pneumatic trailers and tractors haul bulk ILC mineral ingredient products to customer destinations throughout the Midwest. Not only does this allow for coordinated and timely dispatch

of deliveries, but we are able to maintain direct influence on circumstances of the fleet's equipment. One simple case in point is that our fleet of trucks and trailers never haul RUPP material or non-feed freight such as gravel, glass, cement or shavings. We blow out trailer compartments and lines and/or wash out between loads. Many traffic lanes of product transportation we use are strictly dedicated to hauling CaCO₃ products. Even with this degree of care, however, our own transportation fleet is subject to the same procedures of prior load declaration and visual inspection of all trucks presented at our company plants for product loadout. Similar affirmations of load history are made at our corresponding affiliated locations. As mentioned earlier in this discourse, it is not only important to load safe non-contaminated material onto a waiting vessel, but it is equally important to minimize any risk of contamination existing on that vessel as well. Stringent adherence to policy within our own trans-



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portation fleet gives an added measure of confidence. Coupled with protocols addressing the condition of vessels picking up orders, further confidence is gained in dispatching safe products. It is critical to keep in mind that transportation of products must also be a responsible part of providing safe products linking food sources to finished food.

The classic “chicken and the egg” may well serve to illustrate ILC’s segment along the food chain. Before a laying hen can produce an egg, she must grow to maturity. She must be cared for in a safe, healthy environment. The feed she eats as she grows from a hatched chick to pullet to mature laying hen must take

into account nutrients to promote proper skeletal development. Bone formation requires both *calcium and phosphorus* as critical nutrients. In order to furnish poultry diets with adequate levels of both, a safe reliable source of calcium and phosphorus are needed. ILC Resources furnishes both as it supplies the livestock and poultry feeding industries with *calcium* from feed-grade Calcium Carbonate products and *phosphorus* from feed-grade phosphates, such as monocalcium phosphate. After the pullet matures into an adult laying hen and starts her egg laying cycle even more dietary need for supplemental *calcium* is necessary. ILC Resources’ supply of an array of CaCO_3 products will meet this need too. Eggshell formation is paramount in this stage

of the hen’s life cycle. Well over 90% of the eggshell is CaCO_3 . Quantity of CaCO_3 in the diet goes up and the proper form or gradation of CaCO_3 calls for specific gradation products, which ILC specializes in processing. In order for the hen to supply nutritious food in the form of an egg that is **safe** for human consumption, she and all input ingredients that make up her feed must be safe too. In small part and yet a most significant part, ILC Resources’ supply of mineral ingredient products must be safe from harmful contaminants. Acknowledging that need and responding with adequate measures safeguarding the integrity and purity of its products, ILC is doing its part in providing for the safety of *food sources* in order to result in *safe food*.

Plant Renovations for ILC Resources

Renovations to enhance customer service were completed in October 2008 at ILC Resources’ plants in Alden, Iowa.

Twelve new product storage tanks were added to expand the two-lane loadout area at the company’s Alden plant. Each 80-ton tank is dedicated to a different specified feed-grade calcium carbonate product and rests on four loadout cells. Product is

quickly dispersed through retractable spouts placed into top-loading trucks. An enclosed post-loading area allows for product sampling and for drivers to cover loads and close truck lids.

According to Larry Akers, Vice President of Operations, the system’s improvements in entering and exiting and the dozen loading options are cutting loadout time by 30

minutes per truck. The installation is one of the first applications of the German-made technology in the United States.

“We were ‘state-of-the-art’ when we did loadout improvements in 1978,” said Akers. “Until this new system, we haven’t seen technology that would take us to a new level of customer service.”

Alden



Before



During



After completion