



## **Why Use Calcium Chloride??**

1. What is Calcium chloride?
  - Calcium chloride ( $\text{CaCl}_2$ ), CAS # 10043-52-4. This ingredient meets the specification of the Food Chemicals Codex.
2. What will happen if  $\text{CaCl}_2$  is added to *White Oak* Frozen Foods, Reduced Moisture<sup>(TM)</sup> tomatoes?
  - It aids in firming the tomato and facilitates drying.
3. What's the science or technical aspects behind the use of  $\text{CaCl}_2$ ?
  - $\text{CaCl}_2$  is soluble and the  $\text{Ca}^{++}$  reacts with the pectinaceous material in the tomato, forming discrete particles which facilitates drying by having a firmer slightly congealed tomato pieces.
4. How much  $\text{CaCl}_2$  is allowed in a food product?
  - It varies but for tomato products 0.4%, 21 CFR 170.3 (n)(36).
5. How much  $\text{CaCl}_2$  is added in Reduced Moisture<sup>(TM)</sup> tomatoes?
  - Less than 0.1%, by weight of the finished product.

### **Background**

1.  $\text{CaCl}_2$  has indeed been used in the tomato industry for many years. It is affirmed GRAS item per 21 CFR 184.1193.
2. If  $\text{CaCl}_2$  is being used as a processing aid per 21 CFR 101.100(a)(3) (ii), the use must conform to:
  - a) Substances that are added to a food during the processing of such food but are removed in some manner from the food before it is packaged in finished form.
    - In *White Oak's* case this is not true, there is a residual level of  $\text{CaCl}_2$ .
  - b) Substances that are added to a food during the processing, are converted into constituents normally present in the food, and do not significantly increase the amount of the constituents naturally found in the food.
    - This also is not true, the residual  $\text{CaCl}_2$  is over and above that naturally occurring  $\text{CaCl}_2$  found in tomato.
  - c) Substances that are added to a food for their technical or functional effect in the processing but are present in the finished food at insignificant levels and do not have any technical or functional effect in that food.
    - Again, in *White Oak's* case, the residual  $\text{CaCl}_2$  is present and does have a technical or functional effect.

Since the addition of  $\text{CaCl}_2$  does not conform to any of the above, it is not being added as a processing aid and therefore should be stated in the ingredient statement.

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