APPLICATIONS OF SORBIC ACID AND POTASSIUM SORBATE

IT IS SUITABLE FOR MANY DIFFERENT APPLICATIONS

A. Food and Beverages:

Potassium sorbate and sorbic acid have worldwide approval and are successfully utilised in the food and beverage industries.

It can be used in

- Sauces
- Meat and sausage products
- Wine and Spirits and Beverages
- Seafood products
- Cheese
- Baked goods and Dairy products
- Confectionery
- Delicatessen products
- Mayonnaise / Prepared salads
- Pickled vegetables
- Spreads and Margarine
B. Non-Food Applications:

The Non-Food industries also have a need for Effective, Proven Preservatives. Both Sorbic Acid and Potassium Sorbate are excellent for preserving consumer products, susceptible to mold attack or fermentation:

- Pharmaceuticals products.
- Cosmetics (e.g. creams, emulsions, lotions).
- Personal care products (e.g. liquid soaps, shampoos, wet wipes).
- Dishwashing and Cleaning Liquids.
- Detergents.
- Tobacco.

C. In addition, the Good Anti-Microbial activity is put to good use in various Technical Applications such as

- Coating materials.
- Food packaging.
- Adhesives.
- Fungistatic Material.
- Pet Food and Animal Feed products.

USE LEVELS OF SORBATE PRESERVATIVES

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>TYPICAL USE LEVEL (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese and Cheese Products</td>
<td>0.2 - 0.3</td>
</tr>
<tr>
<td>Fruit Drinks</td>
<td>0.025 - 0.075</td>
</tr>
<tr>
<td>Beverage Syrups</td>
<td>0.1</td>
</tr>
<tr>
<td>Imitation Maple Syrup</td>
<td>0.05-0.1</td>
</tr>
<tr>
<td>Item</td>
<td>Sodium Content</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Cider</td>
<td>0.05 - 0.1</td>
</tr>
<tr>
<td>Wine</td>
<td>0.02 - 0.04</td>
</tr>
<tr>
<td>Cakes and Icings</td>
<td>0.05 - 0.1</td>
</tr>
<tr>
<td>Pie Fillings</td>
<td>0.05 - 0.1</td>
</tr>
<tr>
<td>Margarine (unsalted)</td>
<td>0.1</td>
</tr>
<tr>
<td>Prepared Vegetable Salads (Potato, Macaroni, etc)</td>
<td>0.05 - 0.1</td>
</tr>
<tr>
<td>Dried Fruits</td>
<td>0.02 - 0.05</td>
</tr>
<tr>
<td>Semi Moist Pet Food</td>
<td>0.1 - 0.3</td>
</tr>
<tr>
<td>Salad Dressings (Pour-type)</td>
<td>0.05 - 0.1</td>
</tr>
</tbody>
</table>
METHODS OF APPLICATIONS

Sorbate Preservatives may be applied by a variety of Methods based on the Processing conveniency and Type of Food product.

The Five common Methods of Application are

1) Direct addition into the products;
2) Dipping;
3) Spraying;
4) Dusting;
5) Incorporation in the wrapping.

More than one method can be used to thoroughly incorporate the Sorbate throughout the product. Above about 60°C (140° F), Sorbic Acid begins to sublime. It is volatile with steam, without decomposition. This volatility should be considered when Sorbate is to be added prior to a heating step in the process.

ADVANTAGES :

- Effective against numerous Molds and Yeasts.
- Harmless to Humans, Animals and the Environment.
- Purity and Quality exceeds the highest International Requirements and Standards.
- High processing and Storage Stability.
- Easy and Economical to use.
- Neutral Taste and Odor.
- Suitable and Approved for Food products.
- Suitable and approved for Pharmaceuticals, Cosmetics and Personal Care products, Animal Feed, Consumer Articles and Industrial Applications.
- Fully degradable, as similar to fatty Acids, found naturally in Foods.
- Different product types for special applications.