Historical Information:

PM-Säure is the result of investigations at the Swiss Federal Research Institute in Wädenswil, which were carried out almost 50 years ago and published in the "Kleinbrennerei". Since then, this acid protection for distilling mash has been widely used in Switzerland and Austria.

How does PM-Säure work?

Acidification of distilling mash during maceration inhibits the development of harmful bacteria and their formation of unwanted metabolic products (acetaldehyde, acetic acid, butyric acid, acrolein, mannitol). The fermentation of mash, especially from low-acid fruit, cereals and Jerusalem artichoke under acid protection, has been shown to significantly improve the quality of the distillates obtained from it. Compared to distillates from non-acidified mashes, they contain considerably lower concentrations of volatile acids, esters and practically none of the components characteristic of spoiled mashes. At the same time, acid protection intensifies the aromas of the fermented fruit and the clean alcoholic fermentation in the distillate.

In addition, especially higher doses of PM-acid improve the shelf life of fermented mashes during subsequent storage for several months.

What is PM-Säure?

PM-acid is a concentrate of food grade phosphoric and lactic acid. On the one hand, it is less aggressive than concentrated sulphuric acid, but on the other hand, it is a much stronger acid than our (fruit-) acid combination MS ("Säure-Kombination MS"). PM-acid cannot, unlike sulphuric acid, cause any sulphur dioxide sting in the distillate. Compared to fruit acids, it is much more economical in consumption. PM-acid also supplies the fermenting yeast with vital phosphate.

Dosage/Application:

PM-acid should first be diluted by careful stirring into about 10 times the amount of water before processing. This dilution must now be added and carefully stirred in during mashing as much as is necessary to achieve the following pH values:

- **Fruit and Jerusalem artichoke**: pH 3.0
- **Grains, malt, potatoes**: pH 4.7

The pH-value should be measured with test sticks or better with a pH-meter. Details can be found in our information sheet "Brenner pH-Meter". The following dosage figures are approximate empirical values, expressed as undiluted PM-acid per hl mash.

<table>
<thead>
<tr>
<th>Type</th>
<th>Dosage Approx.</th>
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</thead>
<tbody>
<tr>
<td>Stone Fruit</td>
<td>approx. 300 ml</td>
</tr>
<tr>
<td>Pome Fruit</td>
<td>approx. 200 ml</td>
</tr>
<tr>
<td>Grain/Malt</td>
<td>approx. 150 ml</td>
</tr>
<tr>
<td>Jerusalem artichoke</td>
<td>approx. 400 ml</td>
</tr>
</tbody>
</table>

Package sizes:

- 1 L-bottle (No. 5861)
- 10 L-canister (No. 5862)

Safety:

PM-acid is corrosive. The label and the safety data sheet provide information on safe handling of the product.

Storage:

In accessible to children, tightly closed, odourless.

All information in this publication corresponds to our current experience and knowledge. Schliessmann Kellerei-Chemie neither warrants that the products can be used without prior diligent testing as described above, nor that patent rights of third parties are not infringed by their use.