Fructozym® Ultra HPX

Special pectinase for extraction of pome fruit pomace

Product description
Concentrated, liquid enzyme (EC. 3.2.1.15) from Aspergillus niger for intensive maceration of fruit and vegetable mash and extraction of pre-presssed pomace. 
Fructozym® Ultra HPX various technological advantages are:

- Fructozym® Ultra HPX releases the water soluble sugar extract of plant raw materials
- Selective degradation of hydropectin, no further maceration
- Best yield in pome fruit processing while still pressing with highest capacity. Especially important in case of a second pressing stage (cascade process)
- Targeted cleavage of filter inhibiting pectic gums from hairy region parts of fruits pectins (constant filter flux during crossflow filtration)

Dosage
Enzyme dosages depend on raw material, degree of maturity, temperature and contact time.

<table>
<thead>
<tr>
<th>application</th>
<th>mash temperature [°C]</th>
<th>reaction time [min.]</th>
<th>dosage [ml/t mash]</th>
</tr>
</thead>
<tbody>
<tr>
<td>apple/ pear mash</td>
<td>15 - 30</td>
<td>30 - 60</td>
<td>100 - 120</td>
</tr>
<tr>
<td>pomace extraction (pome fruit)</td>
<td>~ 30 - 55</td>
<td>30 - 60</td>
<td>100 - 140</td>
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<tr>
<td>root vegetables (black carrots)</td>
<td>55 - 60</td>
<td>60</td>
<td>80 - 120</td>
</tr>
</tbody>
</table>

Fructozym® Ultra HPX is applied continuously as a 20 - 50 fold dilution directly into the mill or the mash stream. During the mash enzymatisation (first press) no stirring is necessary. For maximal pomace extraction a periodical stirring will improve the yield. The enzyme shows good efficiency in a pH spectrum of pH 3.0 und pH 5.0. The acidity optimum is close to pH 4,25. Recommended application temperature is 15 - 60 °C.

Storage
Best storage conditions are 0 - 10 °C. Higher temperatures will cause shortage of product shelf life. Avoid temperature above 25 °C. Reseal open packages and use completely on short term.