Liquid Invert Sugar

Liquid Invert LF 68 %  Liquid Invert 73 %
Liquid Sugar 77    Liquid Sugar SFD 72 %
S-Invert 70 Liquid Sugar

Key characteristics

• Aqueous solutions with different combinations of sugar (sucrose-glucose-fructose) and of different qualities.

• The figure in the product name indicates the percentage of dry matter.

• The combination of sugar types influences the solution’s sweetness and ability to enhance the flavour and aroma of various products.

• Liquid Invert LF 68 %, Liquid Invert 73 % and S-Invert 70 Liquid Sugar are fully inverted.

• The products meet the high standards for microbiological quality.
If the pH is low, dissolved sucrose can - by means of enzymes and ion exchange - be fully or partially hydrolysed to invert sugar (equal quantities of glucose and fructose). This process is called inversion. Compared with pure sucrose solutions, a higher percentage of dry matter can be obtained if sucrose and invert sugar are mixed. The ratio between invert sugar and sucrose is important and must be regulated according to the risk of crystallisation at different temperatures.

### Areas of application
- Beverages
- Confectionery
- Ice cream and dairy products
- Canned Food
- Patisserie and bakery products
- Fermentation

### Product advantages in application
- Can be used together with other sugar products in for example confectionery in order to prevent crystallisation and to improve shelf life and flavour.
- The use of an already inverted solution in products with low pH reduces the risk of changes in the finished product during storage, e.g. changed flavour profile in beverages.
- The fructose content of the products enhances the berry and fruit flavour in for example juice.

### Product development
Nordic Sugar continuously strives to improve the quality and application of products. Many customers contact us already at an early stage for assistance in the development and adaptation of sugar products. We also make customized products such as blends of sugar with other sweeteners and food ingredients.

### Product advantages in production
- Already inverted liquids, semi-manufactures, provide an easy handling with fewer process steps.
- The products are ready to use.
- Different percentages of dry matter can save energy and time during the production process.

### Storage recommendation
- Store at room temperature, as lower temperatures may cause crystallisation. High temperatures should be avoided due to the risk of discoloration. Recommended storage, see table.
- For bulk handling two storage tanks are recommended where new deliveries are filled into a cleaned tank. New solution must never be poured into stored solution if the tank is not monitored continuously for microbes.
- The storage tank should be ventilated (filtered air is blown in) in order to avoid condensation and microbiological problems.
- Pipes, pumps and storage tanks should be made from acid-proof material.

### Product facts

<table>
<thead>
<tr>
<th>Product</th>
<th>Sucrose, %</th>
<th>Glucose, %</th>
<th>Fructose, %</th>
<th>Colour, IU</th>
<th>Density, 20°C, kg/l</th>
<th>Viscosity, 20°C, cP</th>
<th>Viscosity, 40°C, cP</th>
<th>Recommended storage period</th>
<th>Total number Yeasts, CFU/10 g</th>
<th>Total number Moulds, CFU/10 g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid Invert LF 68 %</td>
<td>max 4</td>
<td>min 32</td>
<td>min 32</td>
<td>max 120</td>
<td>1.33</td>
<td>130</td>
<td>80</td>
<td>approx. 2 weeks &lt;50°C</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>Liquid Invert 73 %</td>
<td>max 4</td>
<td>approx. 35</td>
<td>approx. 34</td>
<td>max 150</td>
<td>1.37</td>
<td>590</td>
<td>120</td>
<td>approx. 2 weeks &lt;50°C</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>Liquid Sugar 77</td>
<td>23-31</td>
<td>22-26</td>
<td>22-26</td>
<td>max 60</td>
<td>1.39</td>
<td>2 400</td>
<td>400</td>
<td>max 1 month &lt;35°C</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>Liquid Sugar SFD 72 %</td>
<td>approx. 29</td>
<td>approx. 22</td>
<td>approx. 21</td>
<td>max 25</td>
<td>1.35</td>
<td>600</td>
<td>100</td>
<td>approx. 2 weeks &lt;50°C</td>
<td>200</td>
<td>20</td>
</tr>
<tr>
<td>S-Invert 70 Liquid Sugar</td>
<td>max 3.5</td>
<td>34-36</td>
<td>32-34</td>
<td>max 60</td>
<td>1.34</td>
<td>200 max 55</td>
<td>1 month 25-30°C</td>
<td>approx. 1 month &lt;25°C</td>
<td>200</td>
<td>20</td>
</tr>
</tbody>
</table>

* D.S.E = Dry Sugar Equivalent

The values in the table are indicative. Read more about solutions in the product information sheet on Liquid Sucrose and Syrup.