# USDEC Chocolate Frosting

## INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Grams</th>
<th>Usage Levels (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar, powdered</td>
<td>448.0</td>
<td>47.0</td>
</tr>
<tr>
<td>Butter</td>
<td>194.0</td>
<td>20.3</td>
</tr>
<tr>
<td>Shortening, emulsified</td>
<td>194.0</td>
<td>20.3</td>
</tr>
<tr>
<td>Whey protein concentrate, 80% protein (WPC 80)</td>
<td>36.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Extract, vanilla or lemon</td>
<td>36.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Water, hot*</td>
<td>30.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Whey protein concentrate, 34% protein (WPC 34)</td>
<td>12.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Cocoa powder, alkalized</td>
<td>2.9</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Formulation can be made with or without water. Water is added to make a more fluffy type frosting. Also, water can be omitted and fat can be increased in place of sugar to create a more dense cake topping.

## NUTRITIONAL CONTENT

<table>
<thead>
<tr>
<th>Per 100g</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Calories</strong></td>
</tr>
<tr>
<td><strong>Total Fat</strong></td>
</tr>
<tr>
<td>Saturated Fat</td>
</tr>
<tr>
<td>Trans Fat</td>
</tr>
<tr>
<td><strong>Cholesterol</strong></td>
</tr>
<tr>
<td><strong>Total Carbohydrates</strong></td>
</tr>
<tr>
<td>Dietary Fiber</td>
</tr>
<tr>
<td>Sugars</td>
</tr>
<tr>
<td><strong>Protein</strong></td>
</tr>
<tr>
<td>Calcium</td>
</tr>
<tr>
<td>Magnesium</td>
</tr>
<tr>
<td>Phosphorus</td>
</tr>
<tr>
<td>Potassium</td>
</tr>
<tr>
<td>Sodium</td>
</tr>
<tr>
<td>Iron</td>
</tr>
<tr>
<td>Vitamin A</td>
</tr>
<tr>
<td>Vitamin C</td>
</tr>
</tbody>
</table>

## PREPARATION

1. Dissolve whey proteins in water, mix for 15 minutes.
2. Add whey protein solution to confectionery sugar and cocoa powder, mix until a smooth paste is formed.
3. Cream or mix in shortening and butter until soft and light.
4. Add vanilla or lemon extract. Add more water if necessary to achieve a thinner consistency.

Rely on the dynamic lineup of U.S. dairy to meet consumer demands for global product development. The U.S. Dairy Export Council (USDEC) offers resources on [ThinkUSAdairy.org](http://www.ThinkUSAdairy.org) including a dairy ingredient supplier search, consumer, nutrition and product research, technical insights and prototype assistance to help develop and launch your next successful product. 

This formula serves as a reference. Product developers are encouraged to modify the formula to meet manufacturing and finished product specification needs. ©2014 U.S. Dairy Export Council.