



PRODUCT INFORMATION

BUTTER FLAVOUR 4001

DESCRIPTION

A light yellow to yellow coloured liquid with the aroma and flavour of melted butter.
Specific gravity at 25°C: 1.050-1.150

APPLICATION

This flavour is heat-resistant to 200°C and is designed for flavouring biscuits, cakes and high boiling point confectionery and baking margarine.

Recommended Dosage

- Biscuits/ Cookies : 0.1% - 0.2% w/w of dough weight
- Cakes : 0.1% w/w of batter weight
- Margarine : 1% - 2% w/w in margarine base
- Toffees : 0.1% w/w

LEGAL STATUS

This flavour consists of nature-identical flavour ingredients which are FEMA GRAS with Propylene Glycol USP as solvent.

CLASSIFICATION

This flavour is classified as nature-identical for all countries.

STORAGE

Keep sealed in a cool place, away from direct sunlight. It is stable for two years.

PACKING

- 25kg HDPE plastic drum
- 5kg plastic container packed in a carton of 4 x 5kg

BAKERY APPLICATION

1. Butter Cake Recipe with 50% Butter Replacement

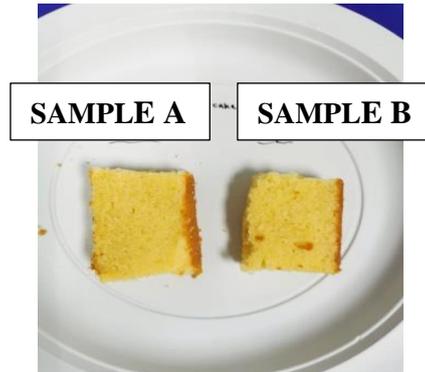
Ingredients	Sample A/ Control (g)	Sample B/ With Butter flavour (g)
Unsalted butter (softened)	20	10
Vegetable shortening	-	10
Caster sugar	23	23
Eggs	23	23
Cake Flour	26	26
Baking Powder	0.4	0.4
Milk	7.3	7.2
<i>Salt</i>	0.3	0.3
<i>Butter Flavour 4001</i>	-	<i>0.10</i>
Total	100.0	100.0

2. Butter Cake Recipe with 100% Butter Replacement

Ingredients	Sample A/ Control (g)	Sample B/ With Butter flavour (g)
Unsalted butter (softened)	10	-
Vegetable shortening	10	20
Caster sugar	23	23
Eggs	23	23
Cake Flour	26	26
Baking Powder	0.4	0.4
Milk	7.3	7.15
<i>Salt</i>	0.3	0.3
<i>Butter Flavour 4001</i>	-	<i>0.15</i>
Total	100.0	100.0

Procedure:

1. Cream the butter and sugar until fluffy. Add milk and egg yolks. Beat well.
2. Sift the cake flour, salt and baking powder separately. Slowly add this into the batter mixture.
3. Last add in the flavor and beaten egg whites and fold in.
4. Pour the cake batter into baking pans and bake for 20-30 minutes (170-180°C). Check the middle using bbq stick if not sticking, then remove.



Sensory design:

Rating Test was conducted, the 20 panelists were required to evaluate Sample A against Sample B for attributes such as color, aroma, taste, texture and flavour on a scale of 10. Also, chose their preferred sample among samples A and B.

Sample A = Control (without flavour)

Sample B = With Butter flavour 4001

Comments:

- Sample B has Natural buttery profile.
- Sample B has rich creamy taste and stronger buttery profile than Sample A.
- Sample B has nice aroma and richer taste than Sample A.
- Overall both cakes are soft, moist and fluffy and can be enjoyed as a tea time cake.

Results:

- Average rating shows that 90% of the panelists preferred Sample B with our Butter flavor 4001 to be better than the control sample with a 50% Butter replacement.
- Average rating shows that 80% of the panelists preferred sample B to be rich and stronger buttery aroma and profile with our Butter flavour 4001 than the control sample with a 100% Butter replacement.

Conclusion:

VK Butter Flavour 4001 is recommend to be used in Butter cake with 50% and 100% replacement of Butter with our Butter flavor 4001 @0.10% and 0.15% respectively. The customer can optimize their cost to have a cost saving of the Butter cake by replacing Butter with our Butter flavour 4001 and vegetable shortening in the base.

3. Butter Cookie Recipe with 100% Butter Replacement

Ingredients	Sample A/ Control (g)	Sample B/ With Butter flavour (g)
Unsalted butter (softened)	28	-
Vegetable shortening	-	28
Caster sugar	20	20
Plain Flour	44.6	44.6
Baking Soda	0.2	0.2
Milk	7	6.85
<i>Salt</i>	0.2	0.2
<i>Butter Flavour 4001</i>	-	<i>0.15</i>
Total	100.0	100.0

Procedure:

1. Cream the butter and sugar until light and airy. Add in the milk and mix together.
2. Sift the plain flour, salt and baking powder separately. Slowly add this into the mixture.
3. Last add in the flavor and mix together in a dough.
4. Transfer the cookie dough into a piping bag on a baking tray. Bake for 12-15 minutes (180-200°C). Check the crust and color using knife if crispy, then remove.



Sensory design:

Rating Test was conducted, the 20 panelists were required to evaluate Sample A against Sample B for attributes such as color, aroma, taste, texture and flavour on a scale of 10. Also, chose their preferred sample among samples A and B.

Sample A = Control (without flavour)

Sample B = With Butter flavour 4001

Comments:

- Sample B was preferred by majority of the panelists to have a stronger buttery aroma and profile as compared to the control sample. While some of the panelists chose the sample A (control) to have more natural taste and mouthfeel although it lacked in buttery aroma profile.

Result:

- **Average rating among the 20 panelists shows that 75% of the panelists prefer sample B to be more crispy texture and more buttery taste profile than the control sample.**
- **The sample B was found to have crispy texture due to 100% butter replacement with veg shortening provided a better bite to the cookie.**

Conclusion:

- *VK Butter Flavour 4001 is recommend to be applied in Butter cookie with 100% replacement of Butter with our Butter flavor 4001 @0.12- 0.15% dosages and premium quality vegetable shortening as a base in the cookie. The customer can optimize their cost to have a cost saving of the Butter.*

Updated 05.05.2020