

Jet Engines, Baked Alaskas and Materials Science

Sponge base ingredients

- 125g butter (some extra for greasing)
- 125g caster sugar
- 2 eggs, beaten
- 125g self-raising flour

Alternatively, you can also buy ready-made sponge.

Meringue ingredients

- 2 egg whites
- 150g caster sugar

Ice cream ingredients

- ...you guessed it! Ice cream. 1L of it.

You can make your own ice cream if you feel adventurous.

PROCEDURE

1. Get the ice cream out of the freezer and leave to soften for 10 minutes or so.
2. Line a pudding bowl with two layers of cling film- leave some hanging over the edge.
3. Put the ice cream in the bowl and press down so it has no big air gaps and a flat surface. Fold the clingfilm over the top and put the whole thing in the freezer.
4. Preheat the oven to 180C/350F/Gas 4.
5. Put a circle of baking paper in a 20cm cake tin and butter the sides of the tin.
6. In a large bowl or an electric food mixer, cream the butter and sugar until light and fluffy. Then beat in the eggs until they're well mixed in.
7. Gently fold in the flour until all the flour is combined.
8. Pour the batter into the prepared cake tin and bake for 20-25 minutes, or until a wooden skewer inserted into the centre of the cake comes out clean.
9. If you are cooking the meringue straight away; take the cake out and turn the temperature up to 220C/425F/Gas 7
10. Leave cake to cool in the tin for 10minutes and then put it on a wire rack to completely cool.
11. For the meringue, take a large clean and dry bowl, and whisk the egg whites until they form peaks when the whisk is removed. You should be able to hold the mixture upside down without it falling out!
12. Add half of the caster sugar and whisk until stiff peaks form when the whisk is removed, and the meringue is glossy. Fold in the remaining sugar with a metal spoon or spatula.
13. When the cake has completely cooled place it in the middle of a baking tray.
14. Take the ice cream out of the freezer. Lift the ice cream out of the bowl using the cling film and put it upside down on the cake and take the cling film off.
15. Spoon over the meringue, spreading it thickly over the ice cream right down to the baking tray. Don't leave any gaps. You can cook the baked Alaska immediately or return it to the freezer for up to an hour (it will take an extra 3-4 minutes in the oven if cooking from frozen).
16. Place in the centre of the hot oven for 3-4 minutes or until the meringue is set on the outside and golden in colour.
17. Carefully transfer the baked Alaska to a serving plate, using a palette knife dipped in hot water to help you slide and push it onto the plate.
18. Serve immediately!