



Technical Information

Water-insoluble sodium carboxymethyl cellulose

Sunrose® SLD Series

~ Cookie hydrolysis/crack prevention effects ~

Sunrose SLD is an ultra-low substitute CMC that combines the properties of CMC with a cellulose powder, and is created by extremely mild carboxymethylation of cellulose. When added to cookies, Sunrose achieves crack prevention effects through better water absorption and retention, which reinforces the cookie by improving its adhesive properties.



• Formulation example

Ingredient	Control	Recommendation (Weight)	
		①	②
Flour	100.0	89.0	89.0
Sugar	40.2	40.2	40.2
Salt	0.7	0.7	0.7
Powdered skim milk	11.2	11.2	11.2
Whole egg	16.7	16.7	16.7
Shortening	22.5	22.5	22.5
Margarine	22.5	22.5	22.5
Baking powder	0.9	0.9	0.9
SLD-F1	-	4.0	-
F30MC	-	-	4.0
Water	9.0	16.0	16.0

※All single-cookie weights are adjusted to 3.2g before baking and 2.6g after baking.

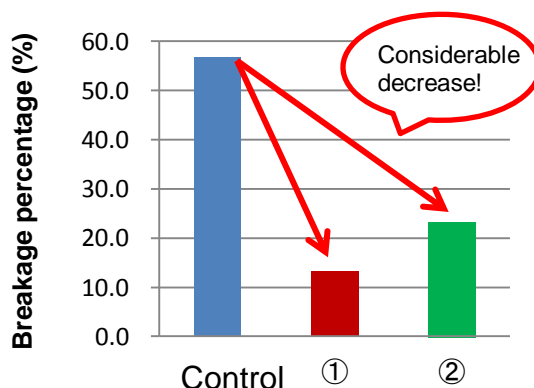
• Tasting evaluation

Evaluation item	Control	①	②
Crunchiness	4	4	3
Melts in the mouth	4	3	2
Hardness	2	4	5

※Evaluation method: Cookies were sampled and rated for each attribute on a scale of 1 to 5 (1 = poor, 5 = good).

• Strength test

Cookies were dropped from a prescribed height after baking and the percentage of cookies that broke was measured.



Adding Sunrose strengthened the cookie dough. Compared to controls, there was a marked decrease in cookie breakages with the addition of SLD.

Effects of adding Sunrose Series

§ . Prevents cookie damage during manufacture and transportation by increasing the strength of the cookie dough!

§ . Offers potential for cost reductions through better hydrolytic effects!

For more details on our products, please contact:

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