

Tempering Chocolate

Understanding Bloom

FAT BLOOM

This results from inadequate tempering or temperature abuse of well-tempered chocolate. It produces a visible film on the surface, ranging from a dull white to a severe white discoloration, and soft or crumbling interior textures. Fat bloom is generally the result of excessive heat attacking the cocoa butter crystals during the tempering or cooling processes. Mixing of confectionery coating and real chocolate can also lead to fat bloom, as the two fats are not compatible.

While fat bloom has a negative effect on appearance, the product remains perfectly safe to eat and can usually be re-tempered to reach the desired appearance. When fat bloom is caused by mixing confectionery coating and real chocolate, re-tempering will not fix the appearance.

Fat bloomed, solid chocolate should not be used as seed chocolate for tempering. Only use well-tempered, unbloomed chocolate as tempering seed.

Chocolate that is fat bloomed can be remelted and retempered. To ensure you are starting with a "clean slate" of melted cocoa butter crystals, completely melt out the bloomed chocolate to 120°F.



Unbloomed Chocolate



Bloomed Chocolate



SUGAR BLOOM

This is a hard white surface film resulting from exposure to moisture. It is formed by the dissolution and subsequent crystallization of sugar on the chocolate's surface. It generally appears as droplets of sugar crystals on the surface of the product.

If sugar bloom is slight, the product may be salvageable if all bloom is removed. If sugar bloom is moderate to severe, the product should most likely be discarded.

Chocolate that is sugar bloomed will often have coarse sugar particles and is not recommended to be used.

Learn more at
www.cargill.com/cocoa-chocolate