

# Shelf Life in Chocolate Work

In collaboration with



CHOCOLATE ACADEMY



## What is Shelf Life?

The shelf life of a product is:  
The time during which a product, produced under normal circumstances and stored in relevant conditions remains suitable for sale and consumption (without unacceptable microbiological development, chemical or taste differences)

How to extend shelf life

Alcohol

Sugars

Fats

PH balance

## Sweetness Compared to Sugar

100	Sucrose
125	Invert sugar
74	Glucose DE 60-40
30	Dextrose
50	Sorbitol
50	Isomalt

## Indicator of Shelf Life

AW > 0.85	Max. 3 weeks
0.85 - 0.7	Max. 3 months
0.7 - 0.65	6 - 9 months
AW < 0.60	Microbiologically stable

# Caramelised Sugar Ganache Recipe – AW 0.67

Sugar	300g
Glucose	150g
Cream	400g
Banana puree	300g
Passionfruit puree	100g
Butter	150g
Cacao Barry Zephyr	200g
White Chocolate	

## Method

1. Dry caramelize the sugar and then add in the glucose  
Pre warm the cream and then add into the caramel to stop it cooking  
Add in the fruit purees and then cook to 106°C  
Cool the mixture down to 38°C and then add in the butter  
Temper the white chocolate, add and emulsify the ganache until smooth and glossy  
Pipe into shells at 26°C

# Cointreau Truffles – AW 0.75

Quantity (g)	Ingredient	Instructions	Water (g)	Alcohol (g)		Water (g)	Alcohol (g)
550	Whipping Cream	Bring the cream to the boil, pour over the chocolate	357.5	0		357.5	0
1200	823 Milk Chocolate	Emulsify well before adding the alcohol	0	0		0	0
150	Cointreau (60%)	Emulsify again and cool to 29°C before piping into truffle shells	60	90	275g of 40% vol	165	110
1900			417.5	90		522.5	110
	If we used a 40% Cointreau we would need to use 275g to get 21% alcohol		90 divided by 417.5 = 21.5				21%
				21.5% alcohol			



# Long shelf life with sugars

## AW 0.71 (approx 6 months)

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Whipping cream 35% fat	340g
Invert Sugar	90g
Glucose Syrup	40g
Sorbitol (powdered)	100g
Salt	2g
Cacao Barry Fleur de Cao	620g
70% Dark Chocolate	
Butter	120g

### Method

1. Add the sugars and salt to the cream and warm until dissolved
2. Melt the chocolate to 30c
3. Add the cream mix to the chocolate and emulsify well

## Resources mentioned

- The Chocolatier's Kitchen
- Jean Pierre Wybauw - Gold
- Be Better Butter (plantbased alternative)
- Aqualab Pawkit Portable Water Activity Metre

We will be running a Shelf Life 2 day course with Alexandre Bourdeaux at the UK Chocolate Academy in Banbury.

If you'd be interested in attending, please contact us at [chocolate\\_academy\\_ukie@barry-callebaut.com](mailto:chocolate_academy_ukie@barry-callebaut.com)

**Don't forget you can watch the replay of the live stream anytime over at @KeylinkLtd on Youtube under the LIVE tab.**

