

# Milk shake APA+APA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **36**
- SRM **5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **10 %**
- Size with trub loss **36 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **42.9 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26.1 liter(s)**
- Total mash volume **34.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **15 min**

## Mash step by step

- Heat up **26.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **75C**
- Sparge using **25.5 liter(s)** of **76C** water or to achieve **42.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	6.75 kg (77.6%)	80.5 %	6
Grain	BESTMALZ - Best Wheat Malt	0.9 kg (10.3%)	82 %	4
Grain	weyermann - abbey malt	0.3 kg (3.4%)	75 %	45
Grain	Wheat, Flaked	0.75 kg (8.6%)	77 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Dry Hop	Citra	100 g	3 day(s)	12.7 %
Dry Hop	Mosaic	100 g	3 day(s)	11.5 %
Whirlpool	Centennial	150 g	3 min	10.5 %
Boil	Equinox	30 g	45 min	13.4 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	30 g	5 min	12.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	1500 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	750 g	Secondary	1 day(s)
Flavor	tonka	5 g	Secondary	5 day(s)

## Notes

- po cichej warka rozbita na pol, 15L rozlane do reszty dodana laktoza i tonka, dodane tez chmielu 50g  
*Mar 27, 2018, 6:17 PM*