

# Bezalkoholowe

- Gravity **1.8 BLG**
- ABV ---
- IBU **42**
- SRM **13.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **25.2 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **2.4 liter(s)**
- Total mash volume **3.2 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	0.13 kg (16.5%)	80 %	16
Grain	Simpsons - Caramalt	0.19 kg (24.1%)	76 %	69
Grain	Caramel/Crystal Malt - 120L	0.06 kg (7.6%)	72 %	236
Grain	Amber Malt	0.03 kg (3.8%)	75 %	43
Grain	Fawcett - Dark Crystal	0.13 kg (16.5%)	71 %	300
Grain	Briess - Chocolate Malt	0.06 kg (7.6%)	60 %	690
Grain	Pszeniczny	0.06 kg (7.6%)	85 %	4
Grain	Żytni	0.13 kg (16.5%)	85 %	8

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	6.5 g	30 min	9.5 %
Boil	Simcoe	5 g	30 min	13.2 %
Boil	Centennial	6.5 g	30 min	10.5 %
Boil	Amarillo	6.5 g	15 min	9.5 %
Boil	Simcoe	2.5 g	15 min	13.2 %
Boil	Centennial	6.5 g	15 min	10.5 %
Aroma (end of boil)	Amarillo	5 g	1 min	9.5 %
Aroma (end of boil)	Simcoe	5 g	1 min	13.2 %
Aroma (end of boil)	Cascade	12.5 g	1 min	6 %
Aroma (end of boil)	Ahtanum	12.5 g	1 min	5 %
Dry Hop	Centennial	50 g	7 day(s)	10.5 %
Dry Hop	Cascade	50 g	7 day(s)	6 %
Dry Hop	Ahtanum	25 g	7 day(s)	5 %

Dry Hop	Simcoe	25 g	7 day(s)	13.2 %
Dry Hop	Columbus/Tomahawk/Zeus	37.5 g	7 day(s)	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Notes

- receptura BrewDog Nanny State  
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