

## NZ APA

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **37**
- SRM **5.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **15.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.5 kg (88.2%)	82 %	4
Grain	Płatki pszeniczne	0.2 kg (3.9%)	60 %	3
Grain	Czarny Ryż Jaśmin	0.4 kg (7.8%)	90 %	60

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	15 g	60 min	11 %
Aroma (end of boil)	Nelson Sauvín	25 g	5 min	11 %
Whirlpool	Motueka	25 g	20 min	7 %
Whirlpool	Nelson Sauvín	25 g	20 min	11 %
Dry Hop	Nelson Sauvín	50 g	2 day(s)	11 %
Dry Hop	Motueka	25 g	2 day(s)	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	300 ml	Fermentum Mobile
Lutra	Ale	Slant	100 ml	---

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips Piwowarski	9 g	Mash	60 min
Water Agent	Chlorek Wapnia	4 g	Mash	60 min
Water Agent	Kwas Mlekowy 80%	1.2 g	Mash	0 min
Water Agent	Kwas Mlekowy 80%	2 g	Mash	0 min

## Notes

- 1.2ml Kwasy do wody do wyśładzania, 2ml korekta zacieru.  
Profil wody Jansy/chmielowy:  
Ca-97.1/Mg-4/Na-4/Cl-57.1/SO4-152.7/HCO3-6.3/  
May 21, 2022, 4:09 PM