

## APA 3 wiadra

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **29**
- SRM **5.6**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **1 %**
- Size with trub loss **24.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **27.2 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **24.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **27.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	6 kg (85.7%)	80 %	7
Grain	Słód owsiany Fawcett	0.5 kg (7.1%)	61 %	5
Grain	Viking Pilsner malt	0.5 kg (7.1%)	82 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Mosaic	50 g	15 min	12 %
Whirlpool	Simcoe	50 g	15 min	13.2 %
Dry Hop	Citra	100 g	2 day(s)	12 %
Dry Hop	Mosaic	100 g	2 day(s)	10 %
Dry Hop	Marynka	100 g	2 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	80 ml	Fermentum Mobile

wlp644 White Labs WLP644 Saccharomyces brux-like Trois	Ale	Liquid	1000 ml	White Labs
Hazy Daze IPA Blend THE YEAST BAY	Ale	Liquid	1000 ml	THE YEAST BAY