

# ŻLAPA\_V3

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **31**
- SRM **4.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **29.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **16.6 liter(s)**

## Steps

- Temp **73 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **12.9 liter(s)** of strike water to **80.6C**
- Add grains
- Keep mash **60 min** at **73C**
- Keep mash **10 min** at **76C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1 kg (27%)	80 %	5
Grain	Żytni	1 kg (27%)	85 %	8
Grain	Monachijski Optima	1 kg (27%)	78.9 %	18
Grain	Słód Carahell (R)	0.3 kg (8.1%)	75 %	25
Grain	Płatki owsiane	0.4 kg (10.8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	15 g	60 min	11 %
Boil	Cascade	25 g	5 min	6.9 %
Boil	Citra	25 g	5 min	13.3 %
Whirlpool	Cascade	25 g	0 min	6.9 %
Whirlpool	Citra	25 g	0 min	13.3 %
Dry Hop	Cascade	30 g	4 day(s)	6.9 %
Dry Hop	Citra	30 g	4 day(s)	13.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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WLP090 - San Diego Super Yeast	Ale	Liquid	1000 ml	White Labs
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### Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc T	1 g	Boil	10 min