

# ŻLAPA

- Gravity **7.1 BLG**
- ABV **2.7 %**
- IBU **23**
- SRM **4.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **31.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **73 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **12.4 liter(s)** of strike water to **80.6C**
- Add grains
- Keep mash **60 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **23.1 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Pilsen	1 kg (28.2%)	80.5 %	4
Grain	Żytni	1 kg (28.2%)	85 %	8
Grain	monachijski Typ I Viking Malt	1 kg (28.2%)	78 %	18
Grain	Słód Carahell (R)	0.35 kg (9.9%)	75 %	25
Grain	Płatki owsiane	0.2 kg (5.6%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	10 g	60 min	9.5 %
Boil	Chinook PL	25 g	5 min	8.6 %
Boil	Cascade PL	25 g	5 min	5.5 %
Boil	Citra	20 g	5 min	12 %
Whirlpool	Chinook PL	25 g	0 min	8.6 %
Whirlpool	Cascade PL	25 g	0 min	5.5 %
Whirlpool	Citra	25 g	0 min	12 %
Dry Hop	Chinook PL	25 g	4 day(s)	8.6 %
Dry Hop	Cascade PL	25 g	4 day(s)	5.5 %

Dry Hop	Citra	30 g	4 day(s)	12 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	100 ml	Fermentum Mobile

### Extras

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