

# Polskie Ale do chłania

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **33**
- SRM **3.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **12.6 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **9.8 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.7 kg (60.7%)	80 %	5
Grain	Strzegom Monachijski typ I	0.2 kg (7.1%)	79 %	16
Grain	Płatki owsiane	0.4 kg (14.3%)	85 %	3
Grain	Pszeniczny	0.5 kg (17.9%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	10 g	60 min	11 %
Aroma (end of boil)	Marynka	15 g	10 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	10 min	4 %
Dry Hop	lunga	10 g	3 day(s)	11 %
Dry Hop	Marynka	10 g	3 day(s)	10 %
Dry Hop	Lublin (Lubelski)	10 g	3 day(s)	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	100 g	Fermentis