

# Polskie ale

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **40**
- SRM **5.2**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **16.1 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.7 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **13 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **16.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (81.1%)	80 %	5
Grain	Viking Wheat Malt	0.5 kg (13.5%)	83 %	5
Grain	Carahell	0.2 kg (5.4%)	77 %	26

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	7 %
Boil	Marynka	10 g	50 min	7 %
Boil	Lublin (Lubelski)	15 g	20 min	2.6 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	5 min	2.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	15 min