

# Pale ale kogo

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **43**
- SRM **4.2**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **16.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **30 min** at **72C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1 kg (28.6%)	79 %	6
Grain	Strzegom Pilzneński	1 kg (28.6%)	80 %	4
Grain	Pszeniczny	1 kg (28.6%)	85 %	4
Grain	Słód owsiany	0.5 kg (14.3%)	61 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Columbus/Tomahawk/Zeus	5 g	30 min	15.5 %
Dry Hop	Cascade	50 g	3 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis BE-134	Ale	Dry	10 g	---