

# PI ALE

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- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **26**
- SRM **4.8**
- Style **Blonde Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **20.7 liter(s)**

## Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **16.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (87%)	80 %	4
Grain	Karmelowy Czerwony	0.3 kg (6.5%)	75 %	59
Grain	Płatki owsiane	0.3 kg (6.5%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	55 min	10 %
Aroma (end of boil)	Sybilla	30 g	10 min	3.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	150 ml	Safale