

Jakieś Jasne

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **36**
- SRM **3.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.2 kg (91.3%)	81 %	4
Grain	Pszeniczny	0.4 kg (8.7%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	12.5 %
Boil	Zula	20 g	10 min	10.6 %
Whirlpool	Zula	30 g	10 min	10.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis