

# Piwko

- Gravity **14 BLG**
- ABV ---
- IBU **24**
- SRM **7.7**
- Style **Saison**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **15.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **72 C**, Time **15 min**
- Temp **65 C**, Time **45 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **15.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (66.7%)	81 %	4
Grain	Monachijski	0.5 kg (16.7%)	80 %	16
Grain	Cara Hell	0.5 kg (16.7%)	80 %	25

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Kent Goldings	20 g	45 min	5.5 %
Aroma (end of boil)	Kent Goldings	30 g	5 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	7 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	Skórka z pomarańczy	20 g	Boil	5 min