

## Target

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **28**
- SRM **5.7**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (48.1%)	81 %	4
Grain	Monachijski	1 kg (19.2%)	80 %	16
Grain	Strzegom Wiedeński	1 kg (19.2%)	79 %	10
Grain	Karmelowy Jasny 30EBC	0.2 kg (3.8%)	75 %	30
Grain	Płatki owsiane	0.5 kg (9.6%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	15 g	60 min	10 %
Boil	Target	10 g	20 min	10 %
Boil	Target	25 g	5 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Safale