

## B D

- Gravity **12.3 BLG**
- ABV ---
- IBU **28**
- SRM **10**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **25.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**
- Temp **80 C**, Time **2 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **2 min** at **80C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.25 kg (50%)	81 %	4
Grain	Strzegom Pale Ale	0.5 kg (11.1%)	79 %	6
Grain	Strzegom Monachijski typ I	0.5 kg (11.1%)	79 %	16
Grain	karmelowy bursztynowy	0.5 kg (11.1%)	70 %	50
Grain	Briess - Carapils Malt	0.35 kg (7.8%)	74 %	3
Grain	Karmelowy Czerwony	0.4 kg (8.9%)	75 %	59

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Boil	Sybilla	20 g	30 min	3.5 %
Boil	Sybilla	10 g	10 min	3.5 %
Boil	Challenger	10 g	10 min	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	500 ml	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	cukier	400 g	Boil	20 min
Flavor	rodzynki	100 g	Boil	10 min