

No. 10

- Gravity **23.3 BLG**
- ABV ---
- IBU **45**
- SRM **40**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **67 C**, Time **50 min**
- Temp **70 C**, Time **20 min**
- Temp **75 C**, Time **3 min**

Mash step by step

- Heat up **22.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **50 min** at **67C**
- Keep mash **20 min** at **70C**
- Keep mash **3 min** at **75C**
- Sparge using **4.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (40.5%)	80 %	4
Grain	Best Maltz - Monachijski typ II	2 kg (27%)	78 %	22
Grain	BESTMALZ - Best Vienna	1 kg (13.5%)	80.5 %	9
Grain	Best Maltz - Chit Malt	0.1 kg (1.4%)	65 %	2
Grain	Best Maltz - Chocolate	0.3 kg (4.1%)	55 %	900
Grain	Best Maltz - Crystal 150	0.5 kg (6.8%)	70 %	150
Grain	Best Maltz - owsiany	0.3 kg (4.1%)	75 %	5
Grain	Strzegom - Czekoladowy	0.2 kg (2.7%)	50 %	1400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Pilgrim	20 g	60 min	10 %
Boil	Pilgrim	30 g	30 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale

Extras

Type	Name	Amount	Use for	Time
Other	Pożywka dla drożdży	5 g	Boil	5 min