

Czyszczenie Magazynu v 1.0

- Gravity **20.7 BLG**
- ABV **9.2 %**
- IBU **48**
- SRM **58.6**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **15.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **16.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **77C**
- Sparge using **4.9 liter(s)** of **76C** water or to achieve **15.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	1 kg (18.7%)	80 %	16
Grain	Strzegom Wiedeński	1.5 kg (28%)	79 %	10
Grain	Jęczmień niesłodowany	0.8 kg (14.9%)	75 %	2
Grain	Caraaroma	0.7 kg (13.1%)	78 %	400
Grain	Caramel/Crystal Malt - 120L	0.3 kg (5.6%)	72 %	160
Grain	Carafa III	0.16 kg (3%)	70 %	1034
Grain	Briess - Pale Ale Malt	0.5 kg (9.3%)	80 %	7
Grain	Jęczmień palony	0.4 kg (7.5%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	15 g	60 min	12.5 %
Boil	Iunga	15 g	30 min	12.5 %
Boil	Saaz (Czech Republic)	20 g	10 min	4.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Safale S-04	Ale	Slant	100 ml	Safale
-------------	-----	-------	--------	--------

Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	500 g	Boil	15 min
Spice	skórki pomarańczy	20 g	Boil	10 min