RIS

- Gravity **23.6 BLG**
- ABV **10.8 %**
- IBU **98**
- SRM **41.5**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **29.1 liter(s)**
- Total mash volume **38.8 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **29.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	8 kg *(82.5%)*	80 %	5
Grain	Jęczmień prażony	0.5 kg *(5.2%)*	65 %	1000
Grain	Słód pszeniczny Bestmalz	0.5 kg *(5.2%)*	82 %	5
Grain	Strzegom Karmel 600	0.5 kg *(5.2%)*	68 %	601
Grain	Strzegom Czekoladowy jasny	0.2 kg *(2.1%)*	68 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	70 g	60 min	15.5 %
Boil	Warrior	25 g	30 min	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	200 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Spice	Wanilia	20 g	Secondary	60 day(s)
Other	płatki dębowe	100 g	Secondary	60 day(s)