Sputnik

- Gravity **21.6 BLG**
- ABV **9.7 %**
- IBU **64**
- SRM **41**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

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

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **3.1 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Karmel 150	0.11 kg *(2.2%)*	75 %	150
Grain	special W	0.055 kg *(1.1%)*	70 %	280
Grain	Strzegom Karmel 300	0.175 kg *(3.5%)*	70 %	299
Grain	Karmelowy Jasny 30EBC	0.105 kg *(2.1%)*	75 %	30
Grain	Jęczmień palony (dodany na ostatnie 10 minut zacierania)	0.1 kg *(2%)*	--- %	985
Grain	Biscuit Malt	0.2 kg *(4%)*	--- %	45
Grain	czekoladowy Bruntal - Soufflet	0.1 kg *(2%)*	--- %	900
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg *(4%)*	73 %	1001
Grain	płatki jęczmienne	0.4 kg *(8.1%)*	--- %	---
Grain	Viking Pale Ale malt	3.5 kg *(70.8%)*	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	12 %
Boil	East Kent Goldings	30 g	15 min	5.1 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Boil	Amarillo	30 g	15 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	300 ml	Fermentum Mobile

Notes

- Dodałem trochę gipsu piwowarskiego i chlorku wapnia do zacierania
  Aug 15, 2019, 12:11 PM