

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **31**
- SRM **31.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **27 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Malting Whisky Nature	3 kg (44.4%)	85 %	4
Grain	Viking Pale Ale malt	2.5 kg (37%)	80 %	5
Grain	Monachijski	0.5 kg (7.4%)	80 %	16
Grain	Carafa II	0.1 kg (1.5%)	70 %	812
Grain	Carafa III	0.1 kg (1.5%)	70 %	1034
Grain	Jęczmień palony	0.25 kg (3.7%)	55 %	985
Grain	Czekoladowy	0.3 kg (4.4%)	60 %	788

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Golding	30 g	50 min	5 %
Aroma (end of boil)	Golding	20 g	10 min	5 %
Boil	Fuggles	30 g	55 min	4.5 %
Aroma (end of boil)	Fuggles	20 g	15 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
us 05	Ale	Dry	11 g	---