

Rye Stout

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **71**
- SRM **34**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.2 kg (45.1%)	80 %	5
Grain	Weyermann - Rye Malt	1.5 kg (21.1%)	85 %	7
Grain	Viking Munich Malt	1 kg (14.1%)	78 %	18
Grain	Weyermann - Carafa III	0.2 kg (2.8%)	70 %	1024
Grain	Weyermann - Chocolate Rye	0.3 kg (4.2%)	20 %	493
Grain	Weyermann - Chocolate Wheat	0.2 kg (2.8%)	74 %	788
Grain	Jęczmień palony	0.2 kg (2.8%)	55 %	985
Grain	Płatki owsiane	0.5 kg (7%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Boil	Citra	15 g	30 min	12 %
Boil	Simcoe	15 g	30 min	13.2 %
Boil	Citra	15 g	15 min	12 %
Boil	Simcoe	15 g	15 min	13.2 %
Dry Hop	Simcoe	30 g	5 day(s)	13.2 %
Dry Hop	Citra	30 g	5 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis