

Blackout

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **21**
- SRM **32.9**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **24.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.7 liter(s)**
- Total mash volume **22.2 liter(s)**

Steps

- Temp **50 C**, Time **20 min**
- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **16.7 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **40 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale - Crisp	4.2 kg (75.5%)	82 %	4.5
Grain	Owsiany - Viking Malt	0.5 kg (9%)	80 %	5
Grain	Caraaroma - Weyermann	0.2 kg (3.6%)	82 %	350
Grain	Dekstrynowy - Viking Malt	0.16 kg (2.9%)	79 %	14
Grain	Carafa II Special - Weyermann	0.25 kg (4.5%)	80 %	1100
Grain	Czekoladowy Pszeniczny - Weyermann	0.25 kg (4.5%)	80 %	1000

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	22 g	60 min	9.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
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WLP013 - London Ale Yeast	Ale	Slant	300 ml	White Labs
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Extras

Type	Name	Amount	Use for	Time
Other	Laktoza	0.65 g	Boil	15 min