

Quadrupel

- Gravity **24 BLG**
- ABV **11 %**
- IBU **20**
- SRM **9.6**
- Style **Belgian Dark Strong Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **23 liter(s)**
- Total mash volume **33.5 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **23 liter(s)** of strike water to **63C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **40 min** at **63C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	8 kg (72.3%)	81 %	4
Grain	Weyermann - Vienna Malt	1.9 kg (17.2%)	81 %	7
Grain	Biscuit Malt	0.5 kg (4.5%)	79 %	50
Grain	carafa I specjal	0.06 kg (0.5%)	--- %	900
Sugar	cukier kandyzowany brązowy	0.5 kg (4.5%)	100 %	---
Sugar	Cukier kandyzowany biały	0.1 kg (0.9%)	100 %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	30 g	75 min	7 %
Boil	Saaz (Czech Republic)	10 g	75 min	4.3 %
Boil	Saaz (Czech Republic)	30 g	20 min	4.3 %

Boil	Saaz (Czech Republic)	20 g	5 min	4.3 %
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