

Quadrupel

- Gravity **24.4 BLG**
- ABV **11.3 %**
- IBU **24**
- SRM **24.4**
- Style **Belgian Dark Strong Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **13 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **66 C**, Time **30 min**
- Temp **71 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **30 min** at **66C**
- Keep mash **15 min** at **71C**
- Keep mash **5 min** at **77C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.6 kg (59.5%)	81 %	4
Grain	Strzegom Wiedeński	0.7 kg (11.6%)	79 %	10
Grain	Pszeniczny	0.4 kg (6.6%)	85 %	4
Grain	Carahell	0.2 kg (3.3%)	77 %	26
Grain	Biscuit Malt	0.2 kg (3.3%)	79 %	45
Grain	Special B Malt	0.2 kg (3.3%)	65.2 %	315
Sugar	Candi Sugar	0.75 kg (12.4%)	78.3 %	200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	20 g	60 min	5.4 %
Boil	East Kent Goldings	20 g	60 min	5.1 %