

Quadrupel

- Gravity **22.9 BLG**
- ABV **10.4 %**
- IBU **30**
- SRM **15.3**
- Style **Belgian Dark Strong Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.6 liter(s) / kg**
- Mash size **11.6 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **11.6 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (80.8%)	81 %	4
Grain	Strzegom Monachijski typ II	0.3 kg (6.1%)	79 %	22
Grain	Special B Malt	0.15 kg (3%)	65.2 %	315
Sugar	Candi Sugar, Amber	0.25 kg (5.1%)	78.3 %	148
Sugar	Candi Sugar, Clear	0.25 kg (5.1%)	78.3 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	8.5 %