

Urk

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **34**
- SRM **6.1**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **20.2 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **14.8 liter(s)**
- Total mash volume **19.4 liter(s)**

Steps

- Temp **52 C**, Time **7 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.8 liter(s)** of strike water to **56.9C**
- Add grains
- Keep mash **7 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzniejszy	4.4 kg (97.8%)	80 %	4
Grain	Crystal II 200	0.1 kg (2.2%)	71 %	200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	13.5 %
Aroma (end of boil)	Aurora	50 g	0 min	8.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
K-97	Ale	Dry	11.5 g	Fermentis