

#VII KWK Polska

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **29**
- SRM **7.4**
- Style **Classic American Pilsner**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.3 liter(s)**
- Total mash volume **8.4 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **1 min**

Mash step by step

- Heat up **6.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **1 min** at **72C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1 kg (47.6%)	80 %	4
Grain	Biscuit Malt	0.5 kg (23.8%)	79 %	45
Grain	Carabelge	0.3 kg (14.3%)	80 %	30
Grain	Rice, Flaked	0.3 kg (14.3%)	70 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	11 %
Boil	Citra	5 g	10 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Slant	200 ml	Fermentum Mobile