

FAH

- Gravity **11 BLG**
- ABV ---
- IBU **51**
- SRM **3.8**
- Style **German Pilsner (Pils)**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **61 C**, Time **10 min**
- Temp **45 C**, Time **71 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **71 min** at **45C**
- Keep mash **10 min** at **61C**
- Keep mash **10 min** at **75C**
- Sparge using **23.1 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (100%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	37 g	90 min	8.2 %
Boil	Lublin (Lubelski)	50 g	45 min	3.3 %
Boil	Lublin (Lubelski)	16 g	10 min	3.3 %