

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 Pilzniejszy | 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 % |