

American Pils FM31

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **33**
- SRM **4.1**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **28.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.9 liter(s)**
- Total mash volume **22.6 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **28.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 5 kg (88.7%) | 80 % | 4 |
| Grain | Weyermann - Carapils | 0.5 kg (8.9%) | 78 % | 4 |
| Grain | Strzegom Wiedeński | 0.14 kg (2.5%) | 79 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 15.7 % |
| Aroma (end of boil) | Galaxy | 100 g | 0 min | 13.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------|--------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 30 ml | Fermentum Mobile |
| Starter 1 10 Blg | | | | |