

## AMERICAN PILS

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **21**
- SRM **2.7**
- Style **Premium American Lager**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **32.7 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.9 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.1 liter(s)** of strike water to **56.9C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **32.7 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount         | Yield  | EBC |
|-------|------------------------|----------------|--------|-----|
| Grain | Briess - Pilsen Malt   | 5.5 kg (94.8%) | 80.5 % | 2   |
| Grain | Briess - Carapils Malt | 0.3 kg (5.2%)  | 74 %   | 3   |

### Hops

| Use for   | Name    | Amount | Time   | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil      | Cascade | 40 g   | 60 min | 6 %        |
| Whirlpool | Citra   | 50 g   | 0 min  | 12 %       |
| Whirlpool | Cascade | 50 g   | 0 min  | 6 %        |

### Yeasts

| Name          | Type  | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------|
| safale w34/70 | Lager | Dry  | 11.5 g | safale     |

### Extras

| Type   | Name       | Amount | Use for | Time   |
|--------|------------|--------|---------|--------|
| Fining | IRISH MOSS | 5 g    | Boil    | 10 min |

## Notes

- HOP STAND od 78-70\* -> około 30 min.  
*Oct 21, 2018, 5:29 PM*