

## #089 American Pils

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **30**
- SRM **3.1**
- Style **Classic American Pilsner**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.1 liter(s)**

### Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield  | EBC |
|-------|----------------------------|----------------|--------|-----|
| Grain | BESTMALZ - Best Heidelberg | 4.3 kg (95.6%) | 80.5 % | 3   |
| Grain | Weyermann - Carapils       | 0.2 kg (4.4%)  | 78 %   | 4   |

### Hops

| Use for | Name        | Amount | Time     | Alpha acid |
|---------|-------------|--------|----------|------------|
| Boil    | Talus       | 20 g   | 60 min   | 8.2 %      |
| Boil    | Talus       | 30 g   | 10 min   | 8.2 %      |
| Dry Hop | Talus       | 25 g   | 3 day(s) | 8.2 %      |
| Dry Hop | Amora Preta | 50 g   | 3 day(s) | 11.2 %     |
| Dry Hop | Nectaron    | 20 g   | 3 day(s) | 12 %       |
| Dry Hop | Citra       | 15 g   | 3 day(s) | 12.7 %     |

### Yeasts

| Name             | Type  | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry  | 23 g   | Fermentis  |

### Extras

| Type   | Name                       | Amount | Use for | Time   |
|--------|----------------------------|--------|---------|--------|
| Fining | whirfloc T                 | 1.25 g | Boil    | 10 min |
| Other  | pożywka dla drożdży Wyeast | 3 g    | Boil    | 10 min |