

## PILS/AIPA

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **48**
- SRM **4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **39.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **48.1 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **30 liter(s)**

### Steps

- Temp **67 C**, Time **90 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **78.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **38.1 liter(s)** of **76C** water or to achieve **48.1 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount       | Yield  | EBC |
|-------|----------------------------|--------------|--------|-----|
| Grain | Briess - Pilsen Malt       | 8 kg (72.7%) | 80.5 % | 2   |
| Grain | Munich Malt                | 1 kg (9.1%)  | 80 %   | 18  |
| Sugar | sugar                      | 1 kg (9.1%)  | 100 %  | 1   |
| Grain | Briess - Wheat Malt, White | 1 kg (9.1%)  | 85 %   | 5   |

### Hops

| Use for   | Name   | Amount | Time   | Alpha acid |
|-----------|--------|--------|--------|------------|
| Whirlpool | Simcoe | 100 g  | 15 min | 13.8 %     |
| Whirlpool | citra  | 100 g  | 15 min | 13.6 %     |
| Whirlpool | Mosaic | 70 g   | 15 min | 11.6 %     |

### Yeasts

| Name  | Type  | Form  | Amount | Laboratory |
|-------|-------|-------|--------|------------|
| us-05 | Ale   | Slant | 100 ml | safale     |
| 34/70 | Lager | Slant | 200 ml | safale     |

### Notes

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