

## AIPA #4

- Gravity **14.5 BLG**
- ABV ---
- IBU **65**
- SRM **12.1**
- Style **American IPA**

### 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 **10 %/h**
- Boil size **48.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **29.1 liter(s)**
- Total mash volume **38.8 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **29.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **28.7 liter(s)** of **76C** water or to achieve **48.1 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount         | Yield  | EBC |
|-------|---------------------------|----------------|--------|-----|
| Grain | Weyermann - Pale Ale Malt | 8.5 kg (87.6%) | 85 %   | 7   |
| Grain | Strzegom Karmel 150       | 0.7 kg (7.2%)  | 75 %   | 150 |
| Grain | Rye, Flaked               | 0.5 kg (5.2%)  | 78.3 % | 4   |

### Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | Marynka  | 50 g   | 50 min   | 10 %       |
| Boil      | Marynka  | 50 g   | 30 min   | 9.5 %      |
| Boil      | Amarillo | 50 g   | 15 min   | 9.5 %      |
| Boil      | Amarillo | 50 g   | 1 min    | 9.5 %      |
| Whirlpool | Amarillo | 50 g   | 15 min   | 9.5 %      |
| Dry Hop   | Amarillo | 50 g   | 4 day(s) | 9.5 %      |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 400 ml | Fermentis  |