

## IPA- na zakończenie sesji

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **40**
- SRM **6.5**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25.8 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **77 C**, Time **3 min**

### Mash step by step

- Heat up **19.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **3 min** at **77C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount         | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 3.5 kg (54.3%) | 85 %  | 7   |
| Grain | Płatki pszeniczne         | 0.5 kg (7.8%)  | 60 %  | 3   |
| Grain | Słód owsiany Fawcett      | 0.3 kg (4.7%)  | 70 %  | 5   |
| Grain | Strzegom Karmel 150       | 0.15 kg (2.3%) | 75 %  | 150 |
| Grain | Maris Otter Crisp         | 1.5 kg (23.3%) | 83 %  | 6   |
| Grain | Płatki owsiane            | 0.5 kg (7.8%)  | 60 %  | 3   |

### Hops

| Use for | Name              | Amount | Time     | Alpha acid |
|---------|-------------------|--------|----------|------------|
| Boil    | amora preta       | 20 g   | 60 min   | 11.2 %     |
| Boil    | amora preta       | 20 g   | 30 min   | 11.2 %     |
| Boil    | amora preta       | 10 g   | 10 min   | 11.2 %     |
| Dry Hop | Lublin (Lubelski) | 100 g  | 2 day(s) | 4.7 %      |
| Dry Hop | amora preta       | 50 g   | 2 day(s) | 11.2 %     |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|             |     |     |        |           |
|-------------|-----|-----|--------|-----------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |
|-------------|-----|-----|--------|-----------|