

## #5 lunga Single Hop Pale Ale

- Gravity **14.5 BLG**
- ABV ---
- IBU **77**
- SRM **6**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.6 liter(s)**

### Mash information

- Mash efficiency **86.5 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **22.6 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount        | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 5 kg (83.3%)  | 80 %  | 4   |
| Grain | Pszeniczny          | 0.5 kg (8.3%) | 85 %  | 3   |
| Grain | Strzegom Karmel 30  | 0.5 kg (8.3%) | 80 %  | 40  |

### Hops

| Use for | Name  | Amount | Time     | Alpha acid |
|---------|-------|--------|----------|------------|
| Boil    | lunga | 40 g   | 60 min   | 11.8 %     |
| Boil    | lunga | 50 g   | 15 min   | 11.8 %     |
| Boil    | lunga | 60 g   | 5 min    | 11.8 %     |
| Dry Hop | lunga | 50 g   | 7 day(s) | 11.8 %     |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |                |     |      |        |
|--------|----------------|-----|------|--------|
| Fining | Mech Irlandzki | 5 g | Boil | 10 min |
|--------|----------------|-----|------|--------|