

#4 lunga Single Hop Pale Ale

- Gravity **14.5 BLG**
- ABV ---
- IBU **77**
- SRM **4.9**
- 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 **34.5 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 **25.5 liter(s)** of **76C** water or to achieve **34.5 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 |
|--------|----------------|-----|------|--------|