

paleale

- Gravity **12.5 BLG**
- ABV ---
- IBU **26**
- SRM **8.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

Steps

- Temp **54 C**, Time **0 min**
- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **6.9 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **0 min** at **54C**
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 1.6 kg (69.6%) | 79 % | 6 |
| Grain | Strzegom Pilzneński | 0.6 kg (26.1%) | 80 % | 4 |
| Grain | Strzegom Karmel 150 | 0.1 kg (4.3%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 7 g | 60 min | 10 % |
| Boil | Cascade | 7 g | 15 min | 6 % |
| Boil | Citra | 10 g | 3 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-05 | Ale | Dry | 6 g | Safale |