

# paleale

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **50**
- SRM **4.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount       | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Strzegom Pale Ale   | 5 kg (83.3%) | 79 %  | 5   |
| Grain | Strzegom Pszeniczny | 1 kg (16.7%) | 81 %  | 6   |

## Hops

| Use for             | Name  | Amount | Time   | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Boil                | Citra | 20 g   | 60 min | 13 %       |
| Boil                | Citra | 10 g   | 30 min | 13 %       |
| Boil                | Zula  | 10 g   | 30 min | 7 %        |
| Aroma (end of boil) | Zula  | 20 g   | 10 min | 7 %        |
| Aroma (end of boil) | Citra | 10 g   | 10 min | 13 %       |
| Whirlpool           | Zula  | 10 g   | 5 min  | 7 %        |
| Whirlpool           | Citra | 10 g   | 5 min  | 13 %       |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale  | Dry  | 11 g   | ---        |