

# Pale Ale 20L

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- Gravity **12.8 BLG**
- ABV ---
- IBU **50**
- SRM **5.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **22.9 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**

## Mash step by step

- Heat up **17.8 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name               | Amount      | Yield | EBC |
|-------|--------------------|-------------|-------|-----|
| Grain | Strzegom Pale Ale  | 5 kg (98%)  | 79 %  | 6   |
| Grain | Strzegom Karmel 30 | 0.1 kg (2%) | 75 %  | 30  |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Citra    | 10 g   | 60 min   | 13.5 %     |
| Boil                | Citra    | 10 g   | 25 min   | 13.5 %     |
| Boil                | Simcoe   | 10 g   | 25 min   | 13 %       |
| Boil                | Citra    | 10 g   | 10 min   | 13.5 %     |
| Boil                | Simcoe   | 10 g   | 10 min   | 13 %       |
| Aroma (end of boil) | Amarillo | 15 g   | 5 min    | 9.5 %      |
| Aroma (end of boil) | Citra    | 15 g   | 5 min    | 13.5 %     |
| Whirlpool           | Simcoe   | 10 g   | 0 min    | 13 %       |
| Whirlpool           | Amarillo | 15 g   | 0 min    | 9.5 %      |
| Whirlpool           | Citra    | 10 g   | 0 min    | 12 %       |
| Dry Hop             | Amarillo | 30 g   | 3 day(s) | 9.5 %      |
| Dry Hop             | Citra    | 30 g   | ---      | 12 %       |

## Yeasts

| <b>Name</b>  | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|--------------|-------------|-------------|---------------|-------------------|
| Safale US-05 | Ale         | Slant       | 300 ml        | Fermentis         |