

## Pale Ale 20L

- Gravity **12.5 BLG**
- ABV ---
- IBU **46**
- SRM **5.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **33.2 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

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

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **33.2 liter(s)** of wort

### Fermentables

| Type  | Name              | Amount      | Yield | EBC |
|-------|-------------------|-------------|-------|-----|
| Grain | Strzegom Pale Ale | 5 kg (100%) | 79 %  | 6   |

### Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Citra    | 10 g   | 60 min   | 13.5 %     |
| Aroma (end of boil) | Citra    | 10 g   | 25 min   | 13.5 %     |
| Aroma (end of boil) | Citra    | 15 g   | 5 min    | 13.5 %     |
| Whirlpool           | Citra    | 10 g   | 0 min    | 13.5 %     |
| Dry Hop             | Citra    | 40 g   | 3 day(s) | 12 %       |
| Boil                | Simcoe   | 10 g   | 25 min   | 13 %       |
| Boil                | Simcoe   | 10 g   | 15 min   | 13 %       |
| Boil                | Amarillo | 10 g   | 5 min    | 9.5 %      |
| Whirlpool           | Amarillo | 10 g   | 0 min    | 9.5 %      |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 300 ml | Fermentis  |