

## Pale Ale 20L

- Gravity **12 BLG**
- ABV ---
- IBU **35**
- SRM **6.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **37.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **26 liter(s)**

### Steps

- Temp **63 C**, Time **75 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **20.8 liter(s)** of strike water to **68.4C**
- Add grains
- Keep mash **75 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **21.8 liter(s)** of **76C** water or to achieve **37.4 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount        | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale          | 3 kg (57.7%)  | 79 %  | 6   |
| Grain | Strzegom Wiedeński         | 2 kg (38.5%)  | 79 %  | 10  |
| Grain | Strzegom Monachijski typ I | 0.2 kg (3.8%) | 79 %  | 16  |

### Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | Citra    | 10 g   | 60 min   | 13.5 %     |
| Boil      | Citra    | 15 g   | 25 min   | 13.5 %     |
| Boil      | Citra    | 10 g   | 10 min   | 13.5 %     |
| Boil      | Citra    | 15 g   | 5 min    | 13.5 %     |
| Whirlpool | Citra    | 10 g   | 0 min    | 12 %       |
| Dry Hop   | Amarillo | 40 g   | 4 day(s) | 9.5 %      |
| Dry Hop   | Citra    | 40 g   | 4 day(s) | 12 %       |
| Whirlpool | Amarillo | 10 g   | 0 min    | 9.5 %      |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|              |     |       |        |           |
|--------------|-----|-------|--------|-----------|
| Safale US-05 | Ale | Slant | 300 ml | Fermentis |
|--------------|-----|-------|--------|-----------|