

Pale Ale 20L

- Gravity **12 BLG**
- ABV ---
- IBU **36**
- SRM **6.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **72 liter(s)**
- Trub loss **10 %**
- Size with trub loss **79.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **112.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **62.4 liter(s)**
- Total mash volume **78 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 **62.4 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 **65.5 liter(s)** of **76C** water or to achieve **112.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 9 kg (57.7%) | 79 % | 6 |
| Grain | Strzegom Wiedeński | 6 kg (38.5%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ I | 0.6 kg (3.8%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | Citra | 30 g | 60 min | 13.5 % |
| Boil | Citra | 45 g | 25 min | 13.5 % |
| Boil | Citra | 30 g | 10 min | 13.5 % |
| Boil | Citra | 45 g | 5 min | 13.5 % |
| Whirlpool | Citra | 30 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 | 30 g | 0 min | 9.5 % |

Yeasts

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

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