

American Pale Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **5.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **80 min**
- Evaporation rate **5 %/h**
- Boil size **29.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **24.9 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **72.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (56.6%) | 80 % | 5 |
| Grain | Strzegom Wiedeński | 1 kg (18.9%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ II | 1 kg (18.9%) | 79 % | 22 |
| Grain | Płatki owsiane | 0.3 kg (5.7%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 17 % |
| Boil | Citra | 20 g | 10 min | 12 % |
| Dry Hop | Citra | 20 g | 7 day(s) | 12 % |
| Dry Hop | Citra | 20 g | 3 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------------|------|-------|--------|------------|
| WLP090 - San Diego Super Yeast | Ale | Slant | 150 ml | White Labs |