

American Pale Ale na ciepło

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **36**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (83.3%) | 80 % | 5 |
| Grain | Wiedeński Weyermann | 0.5 kg (8.3%) | 79 % | 8 |
| Grain | Carapils Weyermann | 0.5 kg (8.3%) | 75 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|--------|------------|
| Boil | Centennial | 25 g | 60 min | 9.4 % |
| Boil | Amarillo | 25 g | 10 min | 8.8 % |
| Boil | Palisade | 25 g | 10 min | 6.1 % |
| Whirlpool | Centennial | 25 g | 30 min | 9.4 % |
| Whirlpool | Amarillo | 25 g | 30 min | 8.8 % |
| Whirlpool | Palisade | 25 g | 30 min | 6.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |