

Resztkowe

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **65**
- SRM **6.8**
- 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 **60 min**
- Evaporation rate **5 %/h**
- Boil size **30.2 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **72 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **79.4C**
- Add grains
- Keep mash **70 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **30.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (83.3%) | 80 % | 5 |
| Grain | Karmelowy Jasny 30EBC | 1 kg (16.7%) | 75 % | 50 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------|--------|--------|------------|
| Boil | Galaxy | 15 g | 60 min | 15 % |
| Boil | Galaxy | 60 g | 5 min | 15 % |
| Whirlpool | Galaxy | 50 g | 50 min | 15 % |