

ms

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **78**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **36.6 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.66 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **27.5 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **73 C**, Time **10 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **73.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **73C**
- Sparge using **24.1 liter(s)** of **76C** water or to achieve **36.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (53.3%) | 80 % | 5 |
| Grain | Pszeniczny | 2 kg (26.7%) | 85 % | 4 |
| Grain | Płatki pszeniczne | 0.5 kg (6.7%) | 60 % | 3 |
| Grain | Płatki owsiane | 0.5 kg (6.7%) | 60 % | 3 |
| Grain | płatki jęczmienne | 0.5 kg (6.7%) | 60 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Chinook | 60 g | 60 min | 13 % |
| Aroma (end of boil) | Mosaic | 50 g | 5 min | 10 % |
| Aroma (end of boil) | Simcoe | 50 g | 5 min | 13.3 % |
| Whirlpool | Mosaic | 50 g | 0 min | 10 % |
| Whirlpool | Simcoe | 50 g | 0 min | 13.3 % |
| Dry Hop | Mosaic | 100 g | 3 day(s) | 10 % |
| Dry Hop | Simcoe | 100 g | 3 day(s) | 13.2 % |