

Ale co?

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **31**
- SRM **5.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.6 liter(s)**
- Total mash volume **14.2 liter(s)**

Steps

- Temp **66 C**, Time **55 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **10.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **55 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.6 kg (64.2%) | 79 % | 5 |
| Grain | Płatki owsiane | 0.4 kg (9.9%) | 70 % | 3 |
| Grain | Strzegom Pilznieński | 0.5 kg (12.3%) | 70 % | 4 |
| Sugar | cukier | 0.5 kg (12.3%) | --- % | --- |
| Grain | Strzegom Karmel 300 | 0.05 kg (1.2%) | 70 % | 299 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil | Marynka | 5 g | 60 min | 8.7 % |
| Boil | Summit | 10 g | 60 min | 18 % |
| Whirlpool | Summit | 20 g | 0 min | 17 % |
| Whirlpool | Lomik | 10 g | 0 min | 6.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| FM 21 | Ale | Slant | 150 ml | --- |