

1,2,3

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **30**
- SRM **3.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-----------------------------|----------------|-------|-----|
| Grain | słód maris otter low colour | 5 kg (90.9%) | 81 % | 3 |
| Adjunct | Płatki owsiane | 0.25 kg (4.5%) | 85 % | 3 |
| Adjunct | płatki jęczmienne | 0.25 kg (4.5%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Boil | Citra | 30 g | 35 min | 12 % |
| Aroma (end of boil) | Citra | 20 g | 0 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us 05 | Ale | Dry | 11 g | --- |