

XXXIII CIPA

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **28**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **21.7 liter(s)**

Steps

- Temp **68 C**, Time **20 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.5 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **20 min** at **68C**
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------|----------------|-------|-----|
| Grain | Pilzneński | 5 kg (80.6%) | 81 % | 4 |
| Grain | Płatki owsiane | 1.2 kg (19.4%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil | Apollo | 7 g | 50 min | 17 % |
| Aroma (end of boil) | Citra | 60 g | 5 min | 12 % |
| Whirlpool | Citra | 60 g | 0 min | 12 % |
| Dry Hop | Citra | 90 g | 3 day(s) | 12 % |