

Idi na ch*j

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **62**
- SRM **4.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|---------------------------|----------------|-------|-----|
| Grain | słód Pale Ale | 3 kg (66.7%) | 79 % | 6 |
| Grain | słód Pale Ale Maris Otter | 0.7 kg (15.6%) | 80 % | 5 |
| Grain | słód pszeniczny | 0.4 kg (8.9%) | 82 % | 3 |
| Adjunct | płatki owsiane | 0.4 kg (8.9%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------|--------|----------|------------|
| Boil | Azacca (USA) | 10 g | 30 min | 12.8 % |
| Boil | Citra (USA) | 10 g | 30 min | 14.2 % |
| Boil | Azacca (USA) | 10 g | 10 min | 12.8 % |
| Boil | Citra (USA) | 10 g | 10 min | 14.2 % |
| Aroma (end of boil) | Citra (USA) | 10 g | 0 min | 14.2 % |
| Aroma (end of boil) | Galaxy (AUS) | 10 g | 0 min | 17.4 % |
| Whirlpool | Citra (USA) | 15 g | 30 min | 14.2 % |
| Whirlpool | Galaxy (AUS) | 15 g | 30 min | 17.4 % |
| Dry Hop | Azacca (USA) | 20 g | 1 day(s) | 12.8 % |
| Dry Hop | Citra (USA) | 40 g | 1 day(s) | 14.2 % |

| | | | | |
|---------|--------------|------|----------|--------|
| Dry Hop | Galaxy (AUS) | 40 g | 1 day(s) | 17.4 % |
|---------|--------------|------|----------|--------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|------|-------|--------|------------|
| Safeale US-05 | Ale | Slant | 1 ml | Fermentis |