

ATAK CHMIELU

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **60**
- SRM **8.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size --- **liter(s)**
- Total mash volume --- **liter(s)**

Steps

- Temp **70 C**, Time **30 min**

Mash step by step

- Heat up **liter(s)** of strike water to **C**
- Add grains
- Keep mash **30 min** at **70C**
- Sparge using **liter(s)** of **C** water or to achieve **26 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|------------------------------|----------------|-------|-----|
| Liquid Extract | Pale ale w syropie | 3.4 kg (70.8%) | 80 % | 15 |
| Dry Extract | Suchy ekstrakt słodowy jasny | 0.8 kg (16.7%) | 95 % | 16 |
| Grain | Carapils | 0.2 kg (4.2%) | 78 % | 4 |
| Grain | Carared | 0.2 kg (4.2%) | 75 % | 45 |
| Grain | Melanoidynowy | 0.2 kg (4.2%) | 81 % | 70 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil | Simcoe | 20 g | 60 min | 11.1 % |
| Boil | Simcoe | 10 g | 30 min | 11.1 % |
| Boil | Amarillo | 10 g | 15 min | 9.7 % |
| Boil | Simcoe | 20 g | 15 min | 11.1 % |
| Boil | Citra | 20 g | 15 min | 13.9 % |
| Boil | Amarillo | 10 g | 5 min | 9.7 % |
| Boil | Cascade | 10 g | 5 min | 6.8 % |
| Dry Hop | Simcoe | 40 g | 7 day(s) | 11.1 % |
| Dry Hop | Amarillo | 10 g | 7 day(s) | 9.7 % |
| Dry Hop | Cascade | 20 g | 7 day(s) | 6.8 % |
| Dry Hop | Citra | 10 g | 7 day(s) | 13.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |