

# PIERWSZY ATAK CHMIELU

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **40**
- SRM **2.9**
- Style **American IPA**

## 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 **23.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **1.25 liter(s) / kg**
- Mash size **0.8 liter(s)**
- Total mash volume **1.4 liter(s)**

## Steps

- Temp **70 C**, Time **30 min**
- Temp **100 C**, Time **60 min**

## Mash step by step

- Heat up **0.8 liter(s)** of strike water to **88.8C**
- Add grains
- Keep mash **30 min** at **70C**
- Keep mash **60 min** at **100C**
- Sparge using **22.9 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

| Type           | Name                         | Amount         | Yield | EBC |
|----------------|------------------------------|----------------|-------|-----|
| Liquid Extract | Pale Ale                     | 3.4 kg (70.8%) | 70 %  | --- |
| Dry Extract    | Ekstrakt słodowy jasny suchy | 0.8 kg (16.7%) | 70 %  | --- |
| Grain          | Weyermann - Carapils         | 0.2 kg (4.2%)  | 78 %  | 4   |
| Grain          | Carared                      | 0.2 kg (4.2%)  | 75 %  | 39  |
| Grain          | Melanoiden Malt              | 0.2 kg (4.2%)  | 80 %  | 39  |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Simcoe   | 20 g   | 15 min   | 13.2 %     |
| Boil                | Simcoe   | 10 g   | 45 min   | 13.2 %     |
| Boil                | Amarillo | 10 g   | 45 min   | 9.5 %      |
| Aroma (end of boil) | Simcoe   | 20 g   | 1 min    | 13.2 %     |
| Aroma (end of boil) | Amarillo | 10 g   | 1 min    | 9.5 %      |
| Aroma (end of boil) | Cascade  | 10 g   | 1 min    | 6 %        |
| Aroma (end of boil) | Citra    | 20 g   | 1 min    | 12 %       |
| Dry Hop             | Simcoe   | 40 g   | 4 day(s) | 13.2 %     |
| Dry Hop             | Citra    | 10 g   | 4 day(s) | 12 %       |

|         |          |      |          |       |
|---------|----------|------|----------|-------|
| Dry Hop | Amarillo | 10 g | 4 day(s) | 9.5 % |
| Dry Hop | Cascade  | 20 g | 4 day(s) | 6 %   |

## Yeasts

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

## Notes

- Sekcja "Aromat (koniec gotowania)" - chmiele zostały dodane po zakończeniu gotowania. Stąd czas - 1 minuta - orientacyjnie.  
*Dec 1, 2021, 1:44 PM*