

# Atak Chmielu

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **30**
- SRM **13**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **1.8 liter(s)**
- Total mash volume **2.4 liter(s)**

## Steps

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

## Mash step by step

- Heat up **1.8 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **30 min** at **70C**
- Sparge using **24.3 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

## Fermentables

| Type           | Name                        | Amount         | Yield | EBC |
|----------------|-----------------------------|----------------|-------|-----|
| Liquid Extract | Bruntal Pale Ale            | 3.4 kg (70.8%) | 80 %  | 35  |
| Dry Extract    | Browamator jasny            | 0.8 kg (16.7%) | 74 %  | 35  |
| Grain          | Weyermann - Carapils        | 0.2 kg (4.2%)  | 74 %  | 4   |
| Grain          | Weyermann - Carared         | 0.2 kg (4.2%)  | 70 %  | 45  |
| Grain          | Weyermann - Melanoiden Malt | 0.2 kg (4.2%)  | 70 %  | 53  |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Simcoe   | 20 g   | 45 min   | 11.1 %     |
| Boil                | Simcoe   | 10 g   | 15 min   | 11.1 %     |
| Boil                | Amarillo | 10 g   | 15 min   | 9.7 %      |
| Aroma (end of boil) | Simcoe   | 20 g   | 0 min    | 11.1 %     |
| Aroma (end of boil) | Amarillo | 10 g   | 0 min    | 9.7 %      |
| Aroma (end of boil) | Cascade  | 10 g   | 0 min    | 6.8 %      |
| Aroma (end of boil) | Citra    | 20 g   | 0 min    | 12 %       |
| Dry Hop             | Simcoe   | 40 g   | 3 day(s) | 11.1 %     |
| Dry Hop             | Citra    | 10 g   | 3 day(s) | 12 %       |

|         |          |      |          |       |
|---------|----------|------|----------|-------|
| Dry Hop | Amarillo | 10 g | 3 day(s) | 9.7 % |
| Dry Hop | Cascade  | 20 g | 3 day(s) | 6.8 % |

## Yeasts

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