

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