Atak Chmielu

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **55**
- SRM **6.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **29 liter(s)**

Steps

- Temp **69 C**, Time **60 min**

Mash step by step

- Heat up **21.8 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Pale Ale	6.5 kg *(89.7%)*	80 %	6
Grain	Weyermann - Carapils	0.25 kg *(3.4%)*	78 %	4
Grain	Weyermann - Melanoiden Malt	0.25 kg *(3.4%)*	75 %	70
Grain	Weyermann - Carared	0.25 kg *(3.4%)*	75 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	11.7 %
Aroma (end of boil)	Simcoe	10 g	15 min	11.7 %
Aroma (end of boil)	Amarillo	10 g	15 min	6.3 %
Whirlpool	Simcoe	20 g	25 min	11.7 %
Whirlpool	Amarillo	10 g	25 min	6.3 %
Whirlpool	Cascade	10 g	25 min	5.8 %
Whirlpool	Citra	20 g	25 min	13.9 %
Dry Hop	Citra	10 g	3 day(s)	13.9 %
Dry Hop	Simcoe	40 g	3 day(s)	11.7 %
Dry Hop	Cascade	20 g	3 day(s)	5.8 %

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Dry Hop	Amarillo	10 g	3 day(s)	6.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlflock T	1 g	Boil	7 min