

Chmieloza

- Gravity **14 BLG**
- ABV ---
- IBU **106**
- SRM **15.4**
- 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 **25.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	4 kg (71.4%)	80 %	4
Grain	Carahell	0.4 kg (7.1%)	77 %	26
Grain	Caramunich	0.2 kg (3.6%)	73 %	90
Grain	Weyermann - Carared	0.4 kg (7.1%)	75 %	45
Grain	Crystal Light	0.4 kg (7.1%)	75 %	170
Grain	Special B Malt	0.2 kg (3.6%)	65.2 %	315

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	10 g	60 min	12 %
Boil	El Dorado	20 g	60 min	15 %
Boil	Columbus/Tomahawk/Zeus	10 g	30 min	15.5 %
Boil	Sorachi Ace	20 g	30 min	10 %
Boil	El Dorado	20 g	10 min	15 %
Boil	Columbus/Tomahawk/Zeus	10 g	10 min	15.5 %
Boil	Centennial	20 g	10 min	10.5 %

Dry Hop	El Dorado	10 g	5 day(s)	15 %
Dry Hop	Centennial	20 g	5 day(s)	10.5 %
Dry Hop	Citra	40 g	5 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	23 g	---