

Ipa centel

- Gravity **15.7 BLG**
- ABV ---
- IBU **42**
- SRM **23.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **33 liter(s)**
- Trub loss **5 %**
- Size with trub loss **34.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **41.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.8 liter(s)**
- Total mash volume **38.4 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **28.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **76C**
- Sparge using **22.6 liter(s)** of **76C** water or to achieve **41.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (52.1%)	81 %	4
Grain	Monachijski	2 kg (20.8%)	80 %	16
Grain	Strzegom Wiedeński	1 kg (10.4%)	79 %	10
Grain	Strzegom Karmel 30	0.5 kg (5.2%)	75 %	30
Grain	Karmelowy Czerwony	0.5 kg (5.2%)	75 %	59
Grain	Strzegom Karmel 300	0.3 kg (3.1%)	70 %	299
Grain	Strzegom Karmel 600	0.3 kg (3.1%)	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	10 %
Boil	Marynka	20 g	30 min	10 %
Aroma (end of boil)	Centennial	22 g	10 min	10.5 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Spice	Limonka	2 g	Boil	0 min
Spice	Pomarańcza	3 g	Boil	0 min