

IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **51**
- SRM **5.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale/Pils Crisp	5 kg (71.4%)	81 %	5
Grain	Strzegom Monachijski typ I	2 kg (28.6%)	81 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	16.6 %
Boil	Magnum	15 g	40 min	11 %
Boil	Centennial PL	20 g	20 min	6.2 %
Boil	Centennial PL	20 g	15 min	6.2 %
Boil	Chinook PL	10 g	10 min	7.6 %
Aroma (end of boil)	Chinook PL	10 g	0 min	7.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	---