

Ipa

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **90**
- SRM **3.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.6 kg (81.3%)	79 %	6
Sugar	Milk Sugar (Lactose)	0.2 kg (6.3%)	76.1 %	0
Grain	Oats, Flaked	0.4 kg (12.5%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	15 g	30 min	13.1 %
Boil	Simcoe	15 g	30 min	13.2 %
Boil	Chinook	15 g	30 min	13 %
Aroma (end of boil)	Chinook	10 g	10 min	13 %
Aroma (end of boil)	Equinox	10 g	10 min	13.1 %
Aroma (end of boil)	Simcoe	10 g	10 min	13.2 %
Dry Hop	Equinox	5 g	7 day(s)	13.1 %
Dry Hop	Simcoe	5 g	7 day(s)	13.2 %
Dry Hop	Chinook	5 g	7 day(s)	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis