

Full Aroma Hops PI

- Gravity **14.7 BLG**
- ABV ---
- IBU **45**
- SRM **5.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **32.8 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **55 C**, Time **0 min**
- Temp **64 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **60.5C**
- Add grains
- Keep mash **0 min** at **55C**
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **71C**
- Keep mash **10 min** at **76C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **32.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6 kg (96.8%)	80 %	4
Grain	Strzegom Karmel 150	0.2 kg (3.2%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	35 g	60 min	13.5 %
Boil	Cascade	20 g	15 min	5.5 %
Boil	Cascade	10 g	10 min	5.5 %
Boil	Cascade	10 g	5 min	5.5 %
Boil	Cascade	10 g	0 min	5.5 %
Dry Hop	Cascade	50 g	5 day(s)	5.5 %

Yeasts

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