

## #22 Pine Ipa

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **65**
- SRM **4.9**
- 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 **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **30.5 liter(s)**
- Total mash volume **39.2 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **30.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6.2 kg (71.3%)	80 %	4
Grain	Pszeniczny	1.1 kg (12.6%)	85 %	4
Grain	Żytni	1 kg (11.5%)	85 %	8
Grain	Płatki owsiane	0.4 kg (4.6%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	50 g	60 min	12.5 %
Dry Hop	Simcoe	100 g	3 day(s)	12.5 %
Whirlpool	Simcoe	50 g	20 min	12.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Slant	200 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
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Spice	Młode pędy sosny	250 g	Boil	10 min
Fining	Whirlfloc	2 g	Boil	15 min
Water Agent	Gips piwowarski	4 g	Mash	---
Spice	Młode pędy sosny	350 g	Secondary	5 day(s)