

## Forest IPA v3

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- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **77**
- SRM **4.3**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.9 liter(s) / kg**
- Mash size **23.2 liter(s)**
- Total mash volume **31.2 liter(s)**

### Steps

- Temp **63 C**, Time **60 min**
- Temp **73 C**, Time **10 min**

### Mash step by step

- Heat up **23.2 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **73C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (62.5%)	81 %	4
Grain	Viking Pale Ale malt	2 kg (25%)	80 %	5
Grain	Weyermann - Carapils	0.5 kg (6.3%)	78 %	4
Grain	Płatki owsiane	0.5 kg (6.3%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	50 g	60 min	13.5 %
Aroma (end of boil)	Galaxy	50 g	5 min	15 %
Whirlpool	Galaxy	50 g	15 min	15 %
Dry Hop	Idaho 7	100 g	5 day(s)	12.7 %
Dry Hop	Simcoe	50 g	5 day(s)	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	200 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Flavor	Pędy sosny - świeże	50 g	Boil	1 min