

## #13. Polish IPA

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- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **54**
- SRM **5.8**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **22.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Ale	4 kg (61.5%)	80 %	5
Grain	Strzegom Wiedeński	0.5 kg (7.7%)	79 %	10
Grain	Weyermann pszeniczny ciemny	0.4 kg (6.2%)	80 %	16
Grain	Strzegom Monachijski typ II	0.5 kg (7.7%)	79 %	22
Grain	Weyermann - Carapils	0.1 kg (1.5%)	78 %	4
Grain	Rye, Flaked	0.5 kg (7.7%)	78.3 %	4
Grain	Oats, Flaked	0.5 kg (7.7%)	80 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	12.9 %
Aroma (end of boil)	Oktawia	10 g	15 min	7.8 %
Aroma (end of boil)	Oktawia	15 g	10 min	7.8 %
Aroma (end of boil)	Oktawia	25 g	5 min	7.8 %
Aroma (end of boil)	Sybilla	10 g	15 min	6 %
Aroma (end of boil)	Sybilla	15 g	10 min	6 %

Aroma (end of boil)	Sybilla	25 g	5 min	6 %
Whirlpool	Oktawia	50 g	50 min	7.8 %
Whirlpool	Sybilla	50 g	50 min	6 %
Dry Hop	Oktawia	50 g	4 day(s)	7.8 %
Dry Hop	Sybilla	50 g	4 day(s)	6 %
Dry Hop	lunga	20 g	4 day(s)	12.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	150 ml	Fermentum Mobile