

## Polska IPA 2

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **54**
- SRM **4.3**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **17.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **16.4 liter(s)**

### Steps

- Temp **51 C**, Time **10 min**
- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **12.8 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **10 min** at **51C**
- Keep mash **60 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **17.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.2 kg (60.3%)	81 %	2.5
Grain	Strzegom Wiedeński	1 kg (27.4%)	79 %	10
Grain	Rice, Flaked	0.3 kg (8.2%)	70 %	2
Grain	Weyermann - Acidulated Malt	0.15 kg (4.1%)	80 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	10 %
Aroma (end of boil)	Zula	30 g	3 min	9.9 %
Aroma (end of boil)	Zula	30 g	1 min	9.9 %
Whirlpool	Zula	200 g	0 min	9.9 %
Whirlpool	lunga	75 g	0 min	10 %
Dry Hop	Zula	140 g	3 day(s)	9.9 %

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	2 g	Mash	---
Water Agent	Kwas mlekowy	2 g	Mash	---
Fining	Whirlflock	0.5 g	Boil	10 min