

Polska IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **52**
- SRM **5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **1 %**
- Size with trub loss **12.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **16.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 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 **12.3 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 **7.9 liter(s)** of **76C** water or to achieve **16.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.8 kg (51.4%)	80 %	4
Grain	Strzegom Wiedeński	1.2 kg (34.3%)	79 %	10
Grain	Rice, Flaked	0.4 kg (11.4%)	70 %	2
Grain	Weyermann - Acidulated Malt	0.1 kg (2.9%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	30 g	50 min	9.9 %
Boil	Zula	20 g	3 min	9.9 %
Boil	Zula	20 g	1 min	9.9 %
Whirlpool	Zula	120 g	0 min	9.9 %
Dry Hop	Zula	60 g	2 day(s)	9.9 %

Extras

Type	Name	Amount	Use for	Time
------	------	--------	---------	------

Water Agent	gips piwowarski	2 g	Mash	---
Water Agent	kwask mlekowy	2 g	Mash	---
Fining	whirlflock	0.6 g	Boil	10 min
Water Agent	witamina c	2 g	Bottling	---