

## #013 IGOR'S Polish Cascade Pale Ale

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **58**
- SRM **3.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Heidelberg	3 kg (60%)	80.5 %	3
Grain	CastleMalting - Vienna	1 kg (20%)	80 %	7
Grain	Strzegom Pszeniczny	1 kg (20%)	81 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga PL	25 g	60 min	11 %
Boil	Cascade PL	100 g	15 min	5.2 %
Dry Hop	Cascade PL	100 g	5 day(s)	5.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	10 g	Mash	80 min

## Notes

- Gips piwowarski bo mam bardzo miękką wodę 67mg CaCOH na dm<sup>3</sup>, dodatkowo chcę wyeksponować chmiel.  
*Apr 27, 2017, 7:50 PM*