

Insane in the grain

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **31**
- SRM **6.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

Steps

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

Mash step by step

- Heat up **18.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	2 kg (32%)	80 %	8
Grain	Pszeniczny	1 kg (16%)	85 %	4
Grain	Monachijski	1 kg (16%)	80 %	16
Grain	Płatki owsiane	1 kg (16%)	60 %	3
Grain	Żytni	1 kg (16%)	85 %	8
Grain	Weyermann - Carared	0.25 kg (4%)	75 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	15 g	20 min	15 %
Whirlpool	Cascade	20 g	20 min	6 %
Whirlpool	Zula	20 g	20 min	8.3 %
Whirlpool	Galaxy	20 g	20 min	15 %
Dry Hop	Cascade	30 g	6 day(s)	6 %
Dry Hop	Zula	30 g	6 day(s)	8.3 %
Dry Hop	Galaxy	15 g	6 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Safale US-05	Ale	Slant	200 ml	Fermentis
--------------	-----	-------	--------	-----------