

- Gravity **15.4 BLG**
- ABV ---
- IBU **49**
- SRM **10.7**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **100 min**
- Evaporation rate **12 %/h**
- Boil size **30 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **31.3 liter(s)**

### Steps

- Temp **64 C**, Time **80 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **23.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **80 min** at **64C**
- Keep mash **10 min** at **75C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Minch - Irish Craft Pale Ale Malt	5 kg (63.8%)	80 %	7
Grain	weyermann - abbey malt	1.5 kg (19.1%)	75 %	45
Grain	Weyermann - Pale Wheat Malt	1 kg (12.8%)	85 %	5
Grain	bestmalz - rye	0.1 kg (1.3%)	80 %	6
Grain	Bestmalz - Cara Munich Type I	0.235 kg (3%)	75 %	90

### Hops

Use for	Name	Amount	Time	Alpha acid
Dry Hop	Amarillo	30 g	3 day(s)	8.8 %
Dry Hop	Citra	30 g	3 day(s)	12.4 %
Dry Hop	Mosaic	30 g	3 day(s)	11.7 %
Aroma (end of boil)	Jarrylo	15 g	5 min	15 %
Aroma (end of boil)	Chinook	30 g	5 min	12.8 %
Aroma (end of boil)	Waimea	30 g	5 min	15.1 %
Aroma (end of boil)	Cascade	30 g	5 min	6.8 %
Aroma (end of boil)	Simcoe	30 g	5 min	13.2 %

Boil	Jarrylo	15 g	50 min	15 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	50 ml	Fermentum Mobile

## Notes

- fermentacja roszyła po 30h piwrsze dwa dni 16C, potem buzliwa 20~21C przez 14 dni  
Cicha 7dni 20~21C  
Cicha 6dni z chmielem na zimno  
Cold crush 11C 5dni bez chmielu  
Zabutelkowane z 163.6glukozy butelkowanie w 11C reefermentacja w 20C

za duzo karmelu  
Mar 19, 2017, 12:59 PM