

# IPA

- Gravity **17.1 BLG**
- ABV ---
- IBU **62**
- SRM **5.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **19.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **24.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (62%)	80 %	5
Grain	Weyermann - Carapils	0.5 kg (7.8%)	78 %	4
Grain	Weyermann - Carared	0.2 kg (3.1%)	75 %	45
Grain	Pilzneński	1.75 kg (27.1%)	81 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Mosaic	10 g	15 min	10 %
Boil	Mosaic	20 g	10 min	12 %
Aroma (end of boil)	Mosaic	15 g	5 min	10 %
Whirlpool	Mosaic	15 g	0 min	10 %
Dry Hop	Mosaic	30 g	4 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	11.5 g	Fermentis
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## Notes

- Warka uwarzona dnia 11,02,2017, do wystadzenia użyłem 17 l wody, odparowało 5l. Drożdże zadane w 21°C, po półgodzinie zjechałem do 13\*.  
*Feb 11, 2017, 9:53 PM*