

## #ipa na oko

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **52**
- SRM **4.2**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **30.8 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **23.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **72C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **35.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (51.9%)	81 %	4
Grain	Colorado Pale Ale	1 kg (13%)	79 %	6
Grain	Pszeniczny	2 kg (26%)	85 %	4
Grain	Acid Malt	0.5 kg (6.5%)	58.7 %	6
Grain	Żytni	0.2 kg (2.6%)	85 %	8

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	35 min	15.5 %
Whirlpool	Cascade	100 g	5 min	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	10 g	Danstar