

# IPA z zestem

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **36**
- SRM **4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (69.6%)	80 %	5
Grain	Płatki owsiane	0.85 kg (14.8%)	85 %	3
Grain	Płatki pszeniczne	0.9 kg (15.7%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %
Aroma (end of boil)	Cascade PL	40 g	15 min	5.2 %
Aroma (end of boil)	Cascade PL	50 g	1 min	5.2 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Other	zest z 2 limonek	1 g	Secondary	6 day(s)

Other	zest z 2 pomarańczy	1 g	Secondary	6 day(s)
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## Notes

- na cichą warka na pół, do każdej połowy inny zest.  
*Feb 9, 2021, 12:54 PM*