

# Zimna ipa w smaku pełna w hooy

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **53**
- SRM **5.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (71.4%)	80 %	5
Grain	Pszeniczny	1 kg (14.3%)	85 %	4
Grain	Strzegom Monachijski typ I	1 kg (14.3%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Książęcy	30 g	15 min	7 %
Boil	Książęcy	20 g	5 min	7 %
Whirlpool	Książęcy	100 g	30 min	1 %
Boil	Magnat	35 g	60 min	11.2 %