

# Zimny księżunio

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- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **32**
- SRM **4.3**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (80%)	81 %	4
Grain	Płatki owsiane	1 kg (16%)	60 %	3
Sugar	Candi Sugar, Clear	0.25 kg (4%)	78.3 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Książęcy	30 g	60 min	7 %
Mash	Książęcy	100 g	10 min	7 %
Boil	Książęcy	20 g	20 min	7 %
Whirlpool	Książęcy	50 g	1 min	7 %