

# Niskoalkoholowe

- Gravity **7.6 BLG**
- ABV **2.9 %**
- IBU **23**
- SRM **4.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.1 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **12.5 liter(s)**

## Steps

- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **10 liter(s)** of strike water to **78.5C**
- Add grains
- Keep mash **60 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **21.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	1 kg (40%)	80 %	7
Grain	Żytni	1 kg (40%)	85 %	8
Grain	Carahell	0.3 kg (12%)	77 %	26
Grain	Płatki owsiane	0.2 kg (8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Equinox	30 g	30 min	12.4 %
Dry Hop	Amarillo	30 g	4 day(s)	8.8 %
Dry Hop	Falconer's Flight®	30 g	4 day(s)	10.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Other	łuska ryżowa	100 g	Mash	60 min

## Notes

- Equinox - w 70 stopniach 30 min  
*Aug 25, 2018, 12:17 PM*