

# Jedenstka Bożonarodzeniowa 2019

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- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **43**
- SRM **3.6**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **4 %**
- Size with trub loss **23.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **14.3 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.3 kg (90.5%)	80 %	5
Grain	caramel pils	0.2 kg (4.2%)	78 %	7
Grain	płatki ryżowe	0.25 kg (5.3%)	80 %	1

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	65 g	60 min	4 %
Boil	Nelson Sauvín	40 g	10 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Diamond	Lager	Dry	22 g	Lallemand