

# Japszo

- Gravity **12.3 BLG**
- ABV ---
- IBU **13**
- SRM **4**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **44 C**, Time **15 min**
- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **10 min** at **55C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **35.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	3.5 kg (58.3%)	85 %	4
Grain	Pilzneński	2.5 kg (41.7%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	15 g	60 min	6 %
Boil	Citra	5 g	60 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	100 ml	---

## Extras

Type	Name	Amount	Use for	Time
Spice	kolędra	15 g	Mash	10 min
Spice	skórka pomarańczy	3 g	Mash	10 min

Spice	skórka cytryny	1 g	Mash	10 min
Spice	skórka grapefruita	1 g	Mash	10 min

### Notes

- skórki gramy = ilość owoców  
*Apr 17, 2016, 4:31 PM*