

# Włos się jeży!

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **20**
- SRM **5.8**
- Style **Fruit Beer**

## Batch size

- Expected quantity of finished beer **180 liter(s)**
- Trub loss **5 %**
- Size with trub loss **189 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **217.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **129 liter(s)**
- Total mash volume **172 liter(s)**

## Steps

- Temp **70 C**, Time **60 min**

## Mash step by step

- Heat up **129 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Sparge using **131.8 liter(s)** of **76C** water or to achieve **217.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	21 kg (48.8%)	80 %	5
Grain	Strzegom Monachijski typ II	10.5 kg (24.4%)	79 %	22
Grain	Strzegom pszeniczny	8 kg (18.6%)	81 %	6
Grain	Weyermann - Carapils	3.5 kg (8.1%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	100 g	60 min	10 %
Boil	Marynka	50 g	30 min	10 %
Boil	Zula	50 g	10 min	8.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Dry	11.5 g	zuk

## Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	60000 g	Boil	10 min