

# Gorzkie owoce

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **52**
- SRM **3.9**
- Style **Saison**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **75 C**, Time **5 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	1 kg (20%)	85 %	4
Grain	Viking Pale Ale malt	2 kg (40%)	80 %	5
Grain	Pilzneński	2 kg (40%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Rakau (NZ)	15 g	60 min	10.5 %
Boil	Styrian Wolf	20 g	60 min	11.6 %
Aroma (end of boil)	Styrian Cardinal	30 g	10 min	8.2 %
Dry Hop	Styrian Wolf	30 g	2 day(s)	11.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
safale be-134	Ale	Dry	11.4 g	---