

# Letnie upały 15blg Voss SOUR Saison

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **28**
- SRM **9.5**
- 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 **16.6 liter(s)**
- Total mash volume **22.2 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **16.6 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.3 kg (73.5%)	81 %	4
Grain	Pszeniczny	0.6 kg (10.3%)	85 %	4
Grain	Słód karmelowy produkcji własnej	0.6 kg (10.3%)	79 %	25
Grain	Strzegom Barwiący	0.05 kg (0.9%)	68 %	1300
Sugar	Candi Sugar, Clear	0.3 kg (5.1%)	78.3 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Minstrel	30 g	60 min	4.9 %
Boil	Ministrel	30 g	20 min	4.9 %
Boil	Ministrel	40 g	5 min	4.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Liquid	130 ml	FM

## Extras

Type	Name	Amount	Use for	Time
Spice	Zest z pomarańczy	30 g	Boil	20 min
Spice	Zest z cytryny	10 g	Boil	20 min