

# CZARNY, BEZ - ELDERBERRY FLOWERS SOUR ALE

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **7**
- SRM **5**
- Style **Berliner Weisse**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 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 **68 C**, Time **90 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **60 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **21 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (16.7%)	79 %	22

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	GR50	10 g	30 min	6.1 %
Boil	GR50	10 g	15 min	6.1 %
Whirlpool	GR50	30 g	15 min	6.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP650 - Brettanomyces bruxellensis	Ale	Slant	180 ml	White Labs

## Extras

Type	Name	Amount	Use for	Time
------	------	--------	---------	------

Other	Lactobacillus Plantarum	7.275 g	Mash	1440 min
Flavor	Kwiaty Czarnego Bzu	300 g	Secondary	5 day(s)