

# berliner biab kettle sour

- Gravity **7.1 BLG**
- ABV **2.7 %**
- IBU **13**
- SRM **2.5**
- Style **Berliner Weisse**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **15 min**
- Evaporation rate **25 %/h**
- Boil size **25.5 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **8.5 liter(s) / kg**
- Mash size **25.5 liter(s)**
- Total mash volume **28.5 liter(s)**

## Steps

- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **60 min**

## Mash step by step

- Heat up **25.5 liter(s)** of strike water to **64.5C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **60 min** at **72C**
- Sparge using **3 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	MINCH MALT - Irish Wheat Malt	1.5 kg (50%)	82 %	4
Grain	MINCH MALT - Irish Wheat Malt	1.5 kg (50%)	82 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Equinox	20 g	10 min	13.4 %
Whirlpool	Lemon drop	20 g	0 min	5.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Belgian Ardennes	Ale	Slant	100 ml	Wyeast Labs

## Extras

Type	Name	Amount	Use for	Time
Other	Swanson Lactobacillus L.Plantarum	30 g	Primary	2 day(s)

## Notes

- zakwaszane L.plantarum 20 kapsulek (kasulka na litr 10miliardowCFU/kapsulke), otwarte zadane w 28C w kotle, po 48godzinach dodane drozdze.

Piwo chmielone dopiero przy gotowaniu po 48H

*Mar 16, 2019, 2:00 PM*