

# Berliner 2021

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **7**
- SRM **3.3**
- Style **Berliner Weisse**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.8 liter(s)**
- Total mash volume **10.4 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **7.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

| Type  | Name           | Amount       | Yield | EBC |
|-------|----------------|--------------|-------|-----|
| Grain | Pilzneński (W) | 1.3 kg (50%) | 81 %  | 4   |
| Grain | Pszeniczny (W) | 1.3 kg (50%) | 85 %  | 4   |

## Hops

| Use for | Name            | Amount | Time   | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil    | Oktawia PH 2019 | 5 g    | 30 min | 9 %        |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 100 ml | Fermentis  |

## Extras

| Type        | Name           | Amount | Use for | Time   |
|-------------|----------------|--------|---------|--------|
| Water Agent | chlorek wapnia | 3 g    | Mash    | 60 min |
| Water Agent | gips           | 3 g    | Mash    | 60 min |
| Fining      | whirflock      | 1 g    | Boil    | 5 min  |