

## #11 Blackcurrant Sour Ale

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **13**
- SRM **3.1**
- Style **Fruit Beer**

### 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **80 C**, Time **5 min**
- Temp **35 C**, Time **1440 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **37.5C**
- Add grains
- Keep mash **1440 min** at **35C**
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **80C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name               | Amount         | Yield | EBC |
|-------|--------------------|----------------|-------|-----|
| Grain | Pilzneński         | 2.7 kg (77.1%) | 81 %  | 4   |
| Grain | Pszeniczny         | 0.7 kg (20%)   | 85 %  | 4   |
| Grain | Strzegom Karmel 30 | 0.1 kg (2.9%)  | 75 %  | 30  |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Lublin (Lubelski) | 20 g   | 60 min | 4 %        |
| Boil    | Lublin (Lubelski) | 20 g   | 10 min | 4 %        |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |

### Extras

| Type   | Name                 | Amount | Use for | Time      |
|--------|----------------------|--------|---------|-----------|
| Flavor | bakterie l.plantarum | 5 g    | Boil    | 1440 min  |
| Flavor | koncentrat wiśniowy  | 2500 g | Primary | 17 day(s) |