

3 US05 09.03.2021

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **30 %/h**
- Boil size **31.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **16.9 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **63 C**, Time **20 min**
- Temp **68 C**, Time **40 min**
- Temp **74 C**, Time **5 min**

Mash step by step

- Heat up **16.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **68C**
- Keep mash **5 min** at **74C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **31.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Pale Ale | 3 kg (63.8%) | 80 % | 5 |
| Grain | pszeniczny jasny | 1 kg (21.3%) | 80 % | 6 |
| Grain | Monachijski typ I | 0.7 kg (14.9%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Simcoe | 20 g | 60 min | 13.5 % |
| Aroma (end of boil) | Lublin (Lubelski) | 20 g | 10 min | 3.7 % |
| Aroma (end of boil) | Saaz (USA) | 30 g | 5 min | 3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------|--------|---------|-------|
| Fining | Whirlfloc T | 1 g | Boil | 5 min |