

undefined

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **43**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.8 liter(s)**
- Total mash volume **10.4 liter(s)**

Steps

- Temp **67 C**, Time **75 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **7.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|--------|-----|
| Grain | GlobalMalt Pale Ale/Pils | 2 kg (76.9%) | 82 % | 4.5 |
| Grain | Płatki owsiane | 0.25 kg (9.6%) | 85 % | 3 |
| Grain | GlobalMalt Monachijski I | 0.25 kg (9.6%) | 80.2 % | 16 |
| Grain | GlobalMalt Pszeniczny | 0.1 kg (3.8%) | 84 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|--------------------------------------|--------|--------|----------|------------|
| Boil | Mosaic | 10 g | 60 min | 12.4 % |
| Whirlpool | Mosaic | 30 g | 5 min | 12 % |
| Wrzucone zaraz po wyłączeniu palnika | | | | |
| Whirlpool | Citra | 30 g | 5 min | 12.8 % |
| Wrzucone zaraz po wyłączeniu palnika | | | | |
| Dry Hop | Mosaic | 25 g | 2 day(s) | 12 % |
| Dry Hop | Citra | 25 g | 2 day(s) | 12.8 % |

Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------------|-------------|---------------|-------------------|
| FM52 Amerykański Sen | Ale | Liquid | 1000 ml | Fermentum Mobile |
| Starter 2 dni 1L | | | | |