

lekkie ale żytnie

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **24**
- SRM **5.3**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **6 %**
- Size with trub loss **17.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.2 liter(s)**

Mash information

- Mash efficiency **62 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

- Temp **68 C**, Time **30 min**
- Temp **74 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **74C**
- Keep mash **10 min** at **78C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|----------------|-------|-----|
| Grain | Monachijski | 1 kg (27.8%) | 80 % | 16 |
| Grain | Pilzneński | 1.5 kg (41.7%) | 81 % | 4 |
| Grain | Żytni | 0.7 kg (19.4%) | 85 % | 8 |
| Grain | Strzegom Karmel 30 | 0.4 kg (11.1%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|------------|--------|----------|------------|
| First Wort | lunga | 5 g | 75 min | 11 % |
| Boil | lunga | 10 g | 60 min | 11 % |
| Whirlpool | Cascade PL | 50 g | 1 min | 1 % |
| Dry Hop | Galaxy | 30 g | 3 day(s) | 15 % |
| Dry Hop | Cascade PL | 50 g | 3 day(s) | 5.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Safale |