

# Tobruk

- Gravity **12.6 BLG**
- ABV ---
- IBU **51**
- SRM **29.3**
- Style **Oatmeal Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **10 min**
- Temp **68 C**, Time **15 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **3 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **10 min** at **62C**
- Keep mash **15 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **3 min** at **76C**
- Sparge using **22.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type    | Name                            | Amount         | Yield | EBC  |
|---------|---------------------------------|----------------|-------|------|
| Grain   | Strzegom Pale Ale               | 1.4 kg (25%)   | 79 %  | 6    |
| Grain   | Monachijski                     | 1 kg (17.9%)   | 80 %  | 16   |
| Grain   | Strzegom Pilzneński             | 2 kg (35.7%)   | 80 %  | 4    |
| Adjunct | płatki owsiane                  | 0.8 kg (14.3%) | 100 % | 0    |
| Grain   | Weyermann - Carafa III          | 0.2 kg (3.6%)  | 70 %  | 1024 |
| Grain   | pszeniczny czekoladowy weyerman | 0.2 kg (3.6%)  | 80 %  | 800  |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Magnat            | 30 g   | 60 min | 11.2 %     |
| Aroma (end of boil) | Marynka           | 30 g   | 15 min | 10 %       |
| Aroma (end of boil) | Lublin (Lubelski) | 30 g   | 10 min | 4 %        |

## Yeasts

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

| <b>Name</b> | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|-------------|-------------|-------------|---------------|-------------------|
| Safale S-04 | Ale         | Dry         | 11 g          | Safale            |

### **Extras**

| <b>Type</b> | <b>Name</b> | <b>Amount</b> | <b>Use for</b> | <b>Time</b> |
|-------------|-------------|---------------|----------------|-------------|
| Fining      | Irish Moss  | 4 g           | Boil           | 45 min      |