

CZARNA MOZAIKA

- Gravity **15 BLG**
- ABV ---
- IBU **44**
- SRM **47.6**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **44.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **30.4 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **22.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **29.1 liter(s)** of **76C** water or to achieve **44.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|---------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński | 5 kg (56.8%) | 80 % | 4 |
| Grain | Strzegom Pale Ale | 1.5 kg (17%) | 79 % | 6 |
| Grain | Black (Patent) Malt | 0.6 kg (6.8%) | 55 % | 1500 |
| Grain | Caraaroma | 0.5 kg (5.7%) | 78 % | 400 |
| Adjunct | płatki jęczmienne | 1.2 kg (13.6%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|--------|------------|
| Aroma (end of boil) | Citra | 50 g | 30 min | 12.4 % |
| Aroma (end of boil) | Mosaic | 50 g | 10 min | 12.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 270 ml | Safale |