

TB GR

- Gravity **7.2 BLG**
- ABV ---
- IBU **21**
- SRM **7.2**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

Steps

- Temp **63 C**, Time **35 min**
- Temp **70 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **7.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **35 min** at **63C**
- Keep mash **30 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **20.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|--------|-----|
| Grain | Bestmalz Red X | 1.3 kg (52%) | 79 % | 30 |
| Grain | Pszeniczny | 0.8 kg (32%) | 85 % | 4 |
| Grain | Briess - Pilsen Malt | 0.4 kg (16%) | 80.5 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | Lomik | 20 g | 60 min | 4.6 % |
| Boil | Lomik | 20 g | 20 min | 4.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 11.5 g | Safbrew |