

Hefe

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **15**
- SRM **3.3**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44 liter(s)**
- Boil time **70 min**
- Evaporation rate **13 %/h**
- Boil size **55.3 liter(s)**

Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **25.9 liter(s)**
- Total mash volume **33.3 liter(s)**

Steps

- Temp **45 C**, Time **10 min**
- Temp **50 C**, Time **15 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **40 min**

Mash step by step

- Heat up **25.9 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **15 min** at **50C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **73C**
- Sparge using **36.8 liter(s)** of **76C** water or to achieve **55.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Pszeniczny | 4 kg (54.1%) | 85 % | 4 |
| Grain | Carahell | 0.4 kg (5.4%) | 77 % | 26 |
| Grain | Strzegom Pilzneński | 3 kg (40.5%) | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 50 g | 60 min | 4 % |
| Boil | Lublin (Lubelski) | 30 g | 10 min | 4 % |
| Aroma (end of boil) | Lublin (Lubelski) | 20 g | 5 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|------|--------|--------|------------------|
| FM41 Gwoździe i Banany | Ale | Liquid | 300 ml | Fermentum Mobile |