

RIS

- Gravity **27.7 BLG**
- ABV **13.3 %**
- IBU **90**
- SRM **51.4**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **2 %**
- Size with trub loss **51 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **55.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **68.8 liter(s)**
- Total mash volume **96.3 liter(s)**

Steps

- Temp **67 C**, Time **90 min**

Mash step by step

- Heat up **68.8 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **55.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 15 kg (54.5%) | 79 % | 6 |
| Grain | Monachijski | 5 kg (18.2%) | 80 % | 16 |
| Grain | Jęczmień palony | 1.5 kg (5.5%) | 55 % | 985 |
| Grain | Caramunich® typ I | 1.5 kg (5.5%) | 73 % | 80 |
| Grain | Płatki pszeniczne | 1 kg (3.6%) | 85 % | 3 |
| Grain | Płatki owsiane | 1 kg (3.6%) | 85 % | 3 |
| Grain | Carafa | 1 kg (3.6%) | 70 % | 664 |
| Grain | Strzegom Karmel 300 | 1.5 kg (5.5%) | 70 % | 299 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 300 g | 60 min | 10 % |
| Boil | Lublin (Lubelski) | 300 g | 10 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|---------|------------|
| Safale S-04 | Ale | Slant | 2000 ml | Safale |