

Faza młynarza

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **3.9**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 2.5 kg (49%) | 80 % | 4 |
| Grain | Pszeniczny | 2 kg (39.2%) | 85 % | 3 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (9.8%) | 79 % | 12 |
| Grain | Carabelge | 0.1 kg (2%) | 80 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Oktawia | 20 g | 60 min | 7.1 % |
| Boil | Sybilla | 10 g | 15 min | 3.5 % |
| Boil | Oktawia | 10 g | 15 min | 7.1 % |
| Boil | Sybilla | 20 g | 5 min | 3.5 % |
| Boil | Oktawia | 20 g | 5 min | 7.1 % |
| Aroma (end of boil) | Sybilla | 30 g | 0 min | 3.5 % |
| Aroma (end of boil) | Oktawia | 30 g | 0 min | 7.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | --- |