

Mix-wrzesniowy

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **18**
- SRM **10.7**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **44 C**, Time **30 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **30 min** at **44C**
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|--------|-----|
| Grain | Viking Pale Ale malt | 1 kg (23.3%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (23.3%) | 85 % | 4 |
| Grain | Strzegom Pilzneński | 1 kg (23.3%) | 80 % | 4 |
| Grain | Monachijski | 1 kg (23.3%) | 80 % | 16 |
| Grain | Special B Malt | 0.3 kg (7%) | 65.2 % | 315 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Citra | 8 g | 60 min | 12 % |
| Boil | Simcoe | 8 g | 10 min | 13.2 % |
| Boil | Mosaic | 10 g | 5 min | 10 % |
| Aroma (end of boil) | Citra | 10 g | 0 min | 12 % |
| Aroma (end of boil) | Simcoe | 10 g | 0 min | 13.2 % |
| Aroma (end of boil) | Mosaic | 10 g | 0 min | 10 % |
| Dry Hop | Cascade | 30 g | 0 day(s) | 6 % |
| Dry Hop | Amarillo | 25 g | 0 day(s) | 9.5 % |

Yeasts

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