

APA - wiosenne czyszczenie magazynu

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **38**
- SRM **14.3**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **55 C**, Time **7 min**
- Temp **64 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **7 min** at **55C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|--------|-----|
| Grain | Strzegom Pilzneński | 3 kg (54.6%) | 80 % | 4 |
| Grain | Abbey Malt Weyermann | 0.5 kg (9.1%) | 75 % | 45 |
| Grain | Monachijski Ciemny Steinbach | 0.55 kg (10%) | 100 % | 30 |
| Grain | Płatki owsiane | 0.4 kg (7.3%) | 85 % | 3 |
| Grain | Special B Malt | 0.2 kg (3.6%) | 65.2 % | 315 |
| Grain | Caramel/Crystal Malt - 120L | 0.4 kg (7.3%) | 72 % | 150 |
| Grain | Karmelowy żytni Strzegom | 0.34 kg (6.2%) | 75 % | 150 |
| Grain | Karmelowy Jasny 30EBC | 0.1 kg (1.8%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 15.7 % |

| | | | | |
|---------------------|------------|------|--------|--------|
| Boil | Chinook | 10 g | 30 min | 11.3 % |
| Aroma (end of boil) | Citra | 30 g | 0 min | 13.7 % |
| Aroma (end of boil) | Centennial | 13 g | 0 min | 8.9 % |
| Aroma (end of boil) | Mosaic | 17 g | 0 min | 10.4 % |