

Centennial SH

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **29**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **6.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 1.5 kg (65.2%) | --- % | 6 |
| Grain | Pszeniczny | 0.5 kg (21.7%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.3 kg (13%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | Centennial | 20 g | 15 min | 9.7 % |
| Boil | Centennial | 10 g | 5 min | 9.7 % |
| Boil | Centennial | 5 g | 0 min | 9.7 % |
| Dry Hop | Centennial | 15 g | 5 day(s) | 9.7 % |
| Boil | Magnum | 5 g | 5 min | 13 % |
| Dry Hop | Cascade | 15 g | 5 day(s) | 6 % |

Yeasts

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