

PoPeł

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **69**
- SRM **6.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **36.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.9 liter(s)**
- Total mash volume **33.2 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **75 C**, Time **1 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **24.9 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **75C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **36.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|--------|-----|
| Grain | Strzegom Pilzneński | 4 kg (47.1%) | 80 % | 4 |
| Grain | Strzegom Pale Ale | 4 kg (47.1%) | 79 % | 6 |
| Grain | Strzegom Karmel 150 | 0.3 kg (3.5%) | 75 % | 150 |
| Sugar | Candi Sugar, Clear | 0.2 kg (2.4%) | 78.3 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Amarillo | 50 g | 60 min | 9.5 % |
| Aroma (end of boil) | Citra | 10 g | 10 min | 12 % |
| Dry Hop | Centennial | 25 g | 9 day(s) | 10.5 % |
| Boil | Centennial | 25 g | 60 min | 10.5 % |
| Boil | Magnum | 15 g | 60 min | 13.5 % |
| Dry Hop | Amarillo | 20 g | 9 day(s) | 9.5 % |
| Dry Hop | Citra | 10 g | 9 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-----------------------|-----|--------|--------|-------------|
| Wyeast - American Ale | Ale | Liquid | 125 ml | Wyeast Labs |
|-----------------------|-----|--------|--------|-------------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------------|--------|-----------|----------|
| Flavor | syrop z pędów sosny | 1500 g | Secondary | 9 day(s) |