

Pol&rock

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **42**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.1 liter(s)**
- Total mash volume **23.3 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **5 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **18.1 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 3 kg (57.9%) | 79 % | 6 |
| Grain | Płatki żytnie błyskawiczne | 0.8 kg (15.4%) | 85 % | 3 |
| Grain | Płatki owsiane błyskawiczne | 0.88 kg (17%) | 85 % | 3 |
| Grain | Płatki orkiszowe błyskawiczne | 0.5 kg (9.7%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Oktawia | 25 g | 60 min | 7.8 % |
| Boil | Oktawia | 25 g | 30 min | 7.8 % |
| Boil | Oktawia | 25 g | 10 min | 7.8 % |
| Boil | Oktawia | 25 g | 0 min | 7.8 % |
| Dry Hop | Citra | 100 g | 7 day(s) | 13.7 % |

Yeasts

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

| | | | | |
|-------------|-----|-----|--------|--------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |
|-------------|-----|-----|--------|--------|