

Ostatki

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **46**
- SRM **13.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **3.5 %**
- Size with trub loss **13.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **4 %/h**
- Boil size **14.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11 liter(s)**
- Total mash volume **14.2 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **11 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **14.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|-----------------|-------|------|
| Grain | Strzegom Pale Ale | 1.55 kg (49.3%) | 79 % | 6 |
| Grain | Strzegom Pilzneński | 1.5 kg (47.7%) | 80 % | 4 |
| Grain | Strzegom pszenica prażona | 0.05 kg (1.6%) | 70 % | 1000 |
| Grain | Jęczmień palony | 0.045 kg (1.4%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Equinox | 7 g | 30 min | 13.4 % |
| Boil | Mosaic | 7 g | 30 min | 11.7 % |
| Boil | Citra | 7 g | 30 min | 13.5 % |
| Boil | Equinox | 4 g | 10 min | 13.4 % |
| Boil | Citra | 4 g | 10 min | 13.5 % |
| Boil | Mosaic | 4 g | 10 min | 11.7 % |
| Dry Hop | Equinox | 4 g | 3 day(s) | 13.4 % |
| Dry Hop | Citra | 4 g | 3 day(s) | 13.5 % |
| Dry Hop | Mosaic | 4 g | 3 day(s) | 11.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Safeale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech Irlandzki | 5 g | Boil | 10 min |