

XXI APA 2.0

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **52**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **15.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.5 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **20.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 2.45 kg (70%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ I | 0.7 kg (20%) | 79 % | 16 |
| Grain | Płatki owsiane | 0.35 kg (10%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Aroma (end of boil) | Equinox | 20 g | 25 min | 13.1 % |
| Boil | Mosaic | 20 g | 25 min | 10 % |
| Whirlpool | Equinox | 20 g | 5 min | 13.1 % |
| Whirlpool | Mosaic | 20 g | 5 min | 10 % |
| Dry Hop | Equinox | 30 g | 4 day(s) | 13.1 % |
| Dry Hop | Mosaic | 30 g | 4 day(s) | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|---------|------------|
| Safale US-05 | Ale | Dry | 10.06 g | Fermentis |