

Smoczkowe 2.0

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **52**
- SRM **5.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.64 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25.5 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **74.6C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|---------------------------|---------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5 kg (87.7%) | 85 % | 7 |
| Grain | Carahell | 0.5 kg (8.8%) | 77 % | 26 |
| Adjunct | Pszenica niesłodowana | 0.2 kg (3.5%) | 75 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Citra | 5 g | 30 min | 13.5 % |
| Boil | Simcoe | 5 g | 30 min | 13.1 % |
| Boil | Amarillo | 5 g | 30 min | 8.8 % |
| Boil | Cascade | 5 g | 30 min | 7.1 % |
| Boil | Mosaic | 5 g | 30 min | 12 % |
| Boil | Citra | 5 g | 20 min | 13.5 % |
| Boil | Simcoe | 5 g | 20 min | 13.1 % |
| Boil | Amarillo | 5 g | 20 min | 8.8 % |
| Boil | Cascade | 5 g | 20 min | 7.1 % |
| Boil | Mosaic | 5 g | 20 min | 12 % |
| Boil | Citra | 5 g | 10 min | 13.5 % |

| | | | | |
|---------|----------|------|----------|--------|
| Boil | Simcoe | 5 g | 10 min | 13.1 % |
| Boil | Amarillo | 5 g | 10 min | 8.8 % |
| Boil | Cascade | 5 g | 10 min | 7.1 % |
| Boil | Mosaic | 5 g | 10 min | 12 % |
| Boil | Citra | 5 g | 5 min | 13.5 % |
| Boil | Simcoe | 5 g | 5 min | 13.1 % |
| Boil | Amarillo | 5 g | 5 min | 8.8 % |
| Boil | Cascade | 5 g | 5 min | 7.1 % |
| Boil | Mosaic | 5 g | 5 min | 12 % |
| Boil | Citra | 5 g | 0 min | 13.5 % |
| Boil | Simcoe | 5 g | 0 min | 13.1 % |
| Boil | Amarillo | 5 g | 0 min | 8.8 % |
| Boil | Cascade | 5 g | 0 min | 7.1 % |
| Boil | Mosaic | 5 g | 0 min | 12 % |
| Dry Hop | Citra | 10 g | 5 day(s) | 13.5 % |
| Dry Hop | Simcoe | 10 g | 5 day(s) | 13.1 % |
| Dry Hop | Amarillo | 10 g | 5 day(s) | 8.8 % |
| Dry Hop | Cascade | 10 g | 5 day(s) | 7.1 % |
| Dry Hop | Mosaic | 10 g | 5 day(s) | 12 % |
| Dry Hop | Citra | 15 g | 3 day(s) | 13.5 % |
| Dry Hop | Simcoe | 15 g | 3 day(s) | 13.1 % |
| Dry Hop | Amarillo | 15 g | 3 day(s) | 8.8 % |
| Dry Hop | Cascade | 15 g | 3 day(s) | 7.1 % |
| Dry Hop | Mosaic | 15 g | 3 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|--------|--------|-------------|
| Wyeast - American Ale II | Ale | Liquid | 1.8 ml | Wyeast Labs |