

APA-chnąca Żywica

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **21**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **0 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 4 kg (84%) | 79 % | 6 |
| Grain | Carahell | 0.3 kg (6.3%) | 77 % | 26 |
| Grain | Weyermann - Carapils | 0.1 kg (2.1%) | 78 % | 4 |
| Grain | Pszeniczny | 0.36 kg (7.6%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------|--------|--------|------------|
| Boil | Magnum | 15 g | 60 min | 13 % |
| Whirlpool | Simcoe | 40 g | 20 min | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------|------------|--------|---------|--------|
| Other | Pędy sosny | 150 g | Boil | 30 min |
| Other | Pędy sosny | 50 g | Boil | 0 min |