

Dwa razy APA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **27**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **48 liter(s)**
- Trub loss **5 %**
- Size with trub loss **50.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **60.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **39 liter(s)**
- Total mash volume **52 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **74 C**, Time **20 min**

Mash step by step

- Heat up **39 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **74C**
- Sparge using **34.7 liter(s)** of **76C** water or to achieve **60.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 13 kg (100%) | 85 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|----------|------------|
| Boil | Lublin (Lubelski) | 20 g | 60 min | 4 % |
| Boil | Marynka | 40 g | 60 min | 10 % |
| Boil | Cascade PL | 20 g | 60 min | 5.2 % |
| Boil | Cascade PL | 40 g | 5 min | 5.2 % |
| Dry Hop | Cascade PL | 40 g | 7 day(s) | 5.2 % |
| Dry Hop | Nelson Sauvín | 50 g | 7 day(s) | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale | Dry | 22 g | --- |