

Hazy apa urodzinowa

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **27**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.7 liter(s)**
- Total mash volume **27.9 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **21.7 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2 kg (32.3%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (16.1%) | 85 % | 4 |
| Grain | Płatki owsiane | 1.2 kg (19.4%) | 85 % | 3 |
| Grain | Simpsons - Golden Naked Oats | 1 kg (16.1%) | 73 % | 20 |
| Grain | Viking Pilsner malt | 1 kg (16.1%) | 82 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | HBC 472 | 30 g | 60 min | 9.6 % |
| Aroma (end of boil) | HBC 472 | 20 g | 1 min | 9.6 % |
| Dry Hop | HBC 472 | 50 g | 5 day(s) | 9.6 % |
| Dry Hop | BRU-1 | 50 g | 5 day(s) | 15.4 % |
| Dry Hop | Sabro | 50 g | 5 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|------|--------|------------|
| Lallemand new endland | Ale | Dry | 11 g | --- |