

Niskoalkoholowy Żytni American Pale Ale

- Gravity **6.8 BLG**
- ABV **2.6 %**
- IBU **15**
- SRM **4.9**
- 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 **65 min**
- Evaporation rate **10 %/h**
- Boil size **30.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.4 liter(s)**

Steps

- Temp **76 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **10.1 liter(s)** of strike water to **85.3C**
- Add grains
- Keep mash **60 min** at **76C**
- Keep mash **5 min** at **78C**
- Sparge using **23.9 liter(s)** of **76C** water or to achieve **30.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Pilsneński - Viking Malt | 1.2 kg (35.8%) | 82 % | 4 |
| Grain | Żytni - Viking Malt | 1 kg (29.9%) | 63 % | 10 |
| Grain | Pszeniczny - Viking Malt | 0.3 kg (9%) | 83 % | 5 |
| Grain | Abbey Malt - Weyermann | 0.2 kg (6%) | 75 % | 45 |
| Grain | Oats, Flaked | 0.5 kg (14.9%) | 80 % | 2 |
| Grain | Cara Gold - Castle Malting | 0.15 kg (4.5%) | 78 % | 120 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | Oktawia | 25 g | 15 min | 9 % |
| Dry Hop | Cascade | 40 g | 3 day(s) | 5.8 % |
| Dry Hop | Amarillo | 40 g | 3 day(s) | 8.5 % |
| Boil | lunga (PL) | 5 g | 15 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--------------|-----|-----|--------|--------|
| Safale US-05 | Ale | Dry | 11.5 g | Safale |
|--------------|-----|-----|--------|--------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Flavor | Skórka cytryny | 50 g | Boil | 15 min |