

ŻYTANIA APA II

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **27**
- SRM **5.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **12.2 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.2 liter(s)** of strike water to **68.5C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 1.2 kg (27.9%) | 80 % | 5 |
| Grain | Żytńi | 2.5 kg (58.1%) | 85 % | 8 |
| Adjunct | Płatki owsiane | 0.5 kg (11.6%) | 85 % | 3 |
| Grain | Strzegom Karmel 150 | 0.1 kg (2.3%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil | Marynka | 20 g | 60 min | 10 % |
| Boil | Mosaic | 10 g | 15 min | 10 % |
| Boil | Citra | 15 g | 0 min | 12 % |
| Dry Hop | jaryllo | 10 g | 7 day(s) | 12 % |
| Dry Hop | amarillo | 10 g | 7 day(s) | 10 % |
| Dry Hop | Mosaic | 10 g | 5 day(s) | 10 % |
| Dry Hop | Amarillo | 10 g | 5 day(s) | 9.5 % |

Yeasts

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

| | | | | |
|-------------------|-------|-------|---------|------------------|
| FM50 Kłosy Kansas | Wheat | Slant | 1000 ml | Fermentum Mobile |
|-------------------|-------|-------|---------|------------------|