

APA Lekkie bez whirpoola

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **40**
- SRM **5.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **63 liter(s)**
- Trub loss **5 %**
- Size with trub loss **68.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **82.5 liter(s)**

Mash information

- Mash efficiency **87 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **39.6 liter(s)**
- Total mash volume **52.8 liter(s)**

Steps

- Temp **52 C**, Time **0 min**
- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **39.6 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **0 min** at **52C**
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **78C**
- Sparge using **56.1 liter(s)** of **76C** water or to achieve **82.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | pale ale / pils Bydgoski | 9 kg (66.3%) | 80 % | 5 |
| Grain | Płatki owsiane | 1 kg (7.4%) | 85 % | 3 |
| Grain | weyermann przenieczny | 1 kg (7.4%) | 85 % | 4 |
| Grain | Strzegom Monachijski typ II | 2 kg (14.7%) | 79 % | 22 |
| Grain | Special B Malt | 0.2 kg (1.5%) | 65.2 % | 315 |
| Sugar | cukier refermentacja | 0.37 kg (2.7%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Nugget | 45 g | 60 min | 15.3 % |
| Boil | Mosaic | 100 g | 10 min | 12.1 % |
| Aroma (end of boil) | Centennial | 100 g | 1 min | 9.5 % |

Yeasts

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

| | | | | |
|----------------------|-----|-----|------|---------|
| Danstar - Nottingham | Ale | Dry | 13 g | Danstar |
|----------------------|-----|-----|------|---------|