

## APA #1

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **33**
- SRM **5.6**
- 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 **70 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **18.1 liter(s)**
- Total mash volume **23.6 liter(s)**

### Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **25 min**

### Mash step by step

- Heat up **18.1 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **25 min** at **72C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                    | Amount        | Yield | EBC |
|-------|-------------------------|---------------|-------|-----|
| Grain | Słód owsiany Fawcett    | 0.5 kg (9.1%) | 61 %  | 5   |
| Grain | Weyermann - Vienna Malt | 5 kg (90.9%)  | 81 %  | 8   |

### Hops

| Use for | Name                      | Amount | Time   | Alpha acid |
|---------|---------------------------|--------|--------|------------|
| Mash    | Lublin (Lubelski) szyszka | 100 g  | 60 min | 4 %        |
| Boil    | lunga                     | 15 g   | 45 min | 10 %       |
| Boil    | Hallertau                 | 20 g   | 20 min | 4.5 %      |
| Boil    | Citra                     | 25 g   | 8 min  | 12 %       |
| Boil    | Hallertau Spalt Select    | 25 g   | 8 min  | 2.9 %      |

### Yeasts

| Name                         | Type | Form  | Amount  | Laboratory  |
|------------------------------|------|-------|---------|-------------|
| Wyeast - American Wheat 1010 | Ale  | Slant | 1200 ml | Wyeast Labs |