

## APA 30

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **23**
- SRM **6.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **5 min**

### Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **72C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Castle Pale Ale     | 4.5 kg (86.5%) | 80 %  | 8   |
| Grain | Pilzneński          | 0.5 kg (9.6%)  | 81 %  | 4   |
| Grain | Strzegom Karmel 150 | 0.2 kg (3.8%)  | 75 %  | 150 |

### Hops

| Use for   | Name     | Amount | Time   | Alpha acid |
|-----------|----------|--------|--------|------------|
| Boil      | Amarillo | 15 g   | 60 min | 9.5 %      |
| Boil      | Cascade  | 20 g   | 25 min | 6 %        |
| Whirlpool | Amarillo | 15 g   | 60 min | 9.5 %      |
| Whirlpool | Cascade  | 30 g   | 60 min | 6 %        |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |