

# Forest Amber APA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **29**
- SRM **13.3**
- Style **American Amber Ale**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **5 min**
- Temp **80 C**, Time **0 min**

## Mash step by step

- Heat up **7.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **5 min** at **72C**
- Keep mash **0 min** at **80C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

| Type           | Name                        | Amount         | Yield | EBC |
|----------------|-----------------------------|----------------|-------|-----|
| Grain          | Strzegom Monachijski typ II | 2 kg (40.8%)   | 79 %  | 22  |
| Liquid Extract | WES ekstrakt słodowy jasny  | 2.4 kg (49%)   | 80 %  | 45  |
| Grain          | Oats, Flaked                | 0.5 kg (10.2%) | 80 %  | 2   |

## Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Aroma (end of boil) | Cascade PL | 70 g   | 20 min | 5.2 %      |
| Aroma (end of boil) | Zula       | 25 g   | 5 min  | 8.3 %      |
| Whirlpool           | Simcoe     | 50 g   | 1 min  | 13.2 %     |

## Yeasts

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

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |              |      |      |       |
|--------|--------------|------|------|-------|
| Spice  | Pędy sosny   | 50 g | Boil | 7 min |
| Spice  | Pędy świerku | 25 g | Boil | 7 min |
| Fining | Whirlfloc    | 3 g  | Boil | 5 min |