

# apLaUS

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **41**
- SRM **6.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **1 %**
- Size with trub loss **22.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **9 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25.4 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **71.1C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount        | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Strzegom Red Activ 30-40 | 1 kg (18.5%)  | 80 %  | 35  |
| Grain | Strzegom Pilzneński      | 4 kg (74.1%)  | 80 %  | 4   |
| Grain | Płatki owsiane           | 0.4 kg (7.4%) | 85 %  | 3   |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Amarillo | 30 g   | 60 min   | 9.5 %      |
| Boil                | Cascade  | 10 g   | 30 min   | 6 %        |
| Aroma (end of boil) | Cascade  | 20 g   | 10 min   | 6 %        |
| Aroma (end of boil) | Zula     | 10 g   | 5 min    | 7.3 %      |
| Dry Hop             | Amarillo | 20 g   | 3 day(s) | 9.5 %      |
| Dry Hop             | Zula     | 10 g   | 3 day(s) | 7.3 %      |

## Yeasts

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

## Extras

| Type   | Name        | Amount | Use for  | Time  |
|--------|-------------|--------|----------|-------|
| Other  | Glukoza     | 170 g  | Bottling | ---   |
| Fining | Whirlfloc T | 1 g    | Boil     | 5 min |