

# Apa Amarillo

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- Gravity **11.4 BLG**
- ABV ---
- IBU **34**
- SRM **5.2**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount        | Yield | EBC |
|-------|-------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 4.2 kg (100%) | 79 %  | 6   |

## Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | Amarillo | 25 g   | 60 min | 9.5 %      |
| Aroma (end of boil) | Amarillo | 25 g   | 3 min  | 9.5 %      |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us 05 | Ale  | Dry  | 11.5 g | ---        |

## Extras

| Type  | Name                | Amount | Use for | Time   |
|-------|---------------------|--------|---------|--------|
| Spice | skorka z bergamotki | 20 g   | Boil    | 10 min |
| Spice | zest z limonki      | 40 g   | Boil    | 3 min  |