

## AM 03,17

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- Gravity **13.3 BLG**
- ABV ---
- IBU **28**
- SRM **6.3**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.7 liter(s)**
- Total mash volume **16.9 liter(s)**

### Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **12.7 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **21.9 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount          | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Strzegom Pilzneński        | 2.12 kg (50.2%) | 80 %  | 4   |
| Grain | Strzegom Monachijski typ I | 1.3 kg (30.8%)  | 79 %  | 16  |
| Grain | Strzegom Pszeniczny        | 0.5 kg (11.8%)  | 81 %  | 6   |
| Grain | Strzegom Karmel 30         | 0.3 kg (7.1%)   | 75 %  | 30  |

### Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | Amarillo | 10 g   | 60 min   | 9.5 %      |
| Boil      | Amarillo | 10 g   | 20 min   | 9.5 %      |
| Boil      | Amarillo | 10 g   | 10 min   | 9.5 %      |
| Boil      | Citra    | 10 g   | 5 min    | 12 %       |
| Whirlpool | Citra    | 30 g   | 0 min    | 12 %       |
| Dry Hop   | Amarillo | 20 g   | 5 day(s) | 9.5 %      |
| Dry Hop   | Citra    | 20 g   | 5 day(s) | 12 %       |

### Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| <b>Name</b>        | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|--------------------|-------------|-------------|---------------|-------------------|
| Gozdawa german alt | Ale         | Slant       | 200 ml        | ---               |