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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **31**
- SRM **7.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **32.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **22.8 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **75C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **32.3 liter(s)** of wort

### Fermentables

| Type  | Name                          | Amount        | Yield | EBC |
|-------|-------------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt          | 5 kg (76.9%)  | 80 %  | 5   |
| Grain | Strzegom Pilzneński           | 1 kg (15.4%)  | 80 %  | 4   |
| Grain | Karmelowy Pszeniczny Strzegom | 0.5 kg (7.7%) | 79 %  | 130 |

### Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Citra      | 15 g   | 60 min | 12 %       |
| Boil    | Citra      | 30 g   | 5 min  | 12 %       |
| Boil    | Centennial | 30 g   | 10 min | 10.5 %     |