

# Strong

- Gravity **24 BLG**
- ABV **11 %**
- IBU **71**
- SRM **14.5**
- Style **American Barleywine**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **28.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **29.9 liter(s)**
- Total mash volume **39.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **29.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **28.7 liter(s)** of wort

## Fermentables

| Type  | Name                                   | Amount         | Yield | EBC |
|-------|--|----------------|-------|-----|
| Grain | Pale Malt (2 Row) UK                   | 8 kg (80.4%)   | 78 %  | 6   |
| Grain | Pszeniczny                             | 0.5 kg (5%)    | 85 %  | 4   |
| Grain | Strzegom Karmel 150                    | 0.15 kg (1.5%) | 75 %  | 150 |
| Grain | Caraaroma                              | 0.3 kg (3%)    | 78 %  | 400 |
| Grain | Castle Malting - Pilznieński 6-rzędowy | 1 kg (10.1%)   | 80 %  | 5   |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Magnum     | 30 g   | 60 min | 13.5 %     |
| Boil    | Ella (AUS) | 40 g   | 30 min | 14.6 %     |
| Boil    | Topaz      | 40 g   | 10 min | 15 %       |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 200 ml | Fermentis  |