

# Grabie

- Gravity **13.2 BLG**
- ABV ---
- IBU **41**
- SRM **7.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **28.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

## Steps

- Temp **50 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **28.4 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount        | Yield | EBC |
|-------|--------------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale              | 4 kg (75.5%)  | 79 %  | 6   |
| Grain | Strzegom Pilzneński            | 1 kg (18.9%)  | 80 %  | 4   |
| Grain | Strzegom karmelowy bursztynowy | 0.3 kg (5.7%) | 70 %  | 70  |

## Hops

| Use for             | Name        | Amount | Time   | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil                | Marynka     | 25 g   | 60 min | 10.5 %     |
| Aroma (end of boil) | Mouteka     | 20 g   | 20 min | 8 %        |
| Aroma (end of boil) | Citra       | 20 g   | 5 min  | 12 %       |
| Whirlpool           | Pacific Gem | 30 g   | 0 min  | 15.3 %     |

## Yeasts

| Name        | Type | Form  | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale  | Slant | 200 ml | Safale     |

## Extras

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

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 15 g   | Boil    | 15 min |