

# ghgfh

- Gravity **21.1 BLG**
- ABV ---
- IBU **22**
- SRM **50.5**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **27.7 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **3.7 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Monachijski typ II | 2.7 kg (43.9%) | 79 %  | 22  |
| Grain | Strzegom Pilzneński         | 2.5 kg (40.7%) | 80 %  | 4   |
| Grain | Strzegom Karmel 600         | 0.35 kg (5.7%) | 68 %  | 601 |
| Grain | Jęczmień palony             | 0.1 kg (1.6%)  | 55 %  | 985 |
| Grain | Strzegom Karmel 300         | 0.5 kg (8.1%)  | 70 %  | 299 |

## Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Tradition | 20 g   | 50 min | 5.5 %      |
| Boil    | Tradition | 20 g   | 10 min | 5.5 %      |
| Boil    | Marynka   | 10 g   | 13 min | 10 %       |

## Yeasts

| Name | Type  | Form | Amount | Laboratory |
|------|-------|------|--------|------------|
| w 35 | Lager | Dry  | 11 g   | ---        |

## Extras

| Type   | Name         | Amount | Use for | Time   |
|--------|--------------|--------|---------|--------|
| Flavor | sliwka suska | 250 g  | Boil    | 15 min |