

# Brother

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **51**
- SRM **6**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **19.5 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.5 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **19.5 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount          | Yield  | EBC |
|-------|------------------------|-----------------|--------|-----|
| Grain | Castle Pale Ale        | 3 kg (55%)      | 80 %   | 8   |
| Grain | BESTMALZ - Best Pilsen | 1.75 kg (32.1%) | 80.5 % | 4   |
| Grain | Płatki owsiane         | 0.5 kg (9.2%)   | 60 %   | 3   |
| Grain | Cara Body Viking Malt  | 0.2 kg (3.7%)   | 60 %   | 8   |

## Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Bravo   | 5.6 g  | 60 min   | 14.5 %     |
| Aroma (end of boil) | Moutere | 15 g   | 15 min   | 15 %       |
| Aroma (end of boil) | Mosaic  | 15 g   | 15 min   | 12.3 %     |
| Whirlpool           | Moutere | 15 g   | 20 min   | 15 %       |
| Whirlpool           | Mosaic  | 15 g   | 20 min   | 12.3 %     |
| Dry Hop             | Moutere | 70 g   | 2 day(s) | 15 %       |
| Dry Hop             | Mosaic  | 20 g   | 2 day(s) | 12.3 %     |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|       |     |       |        |     |
|-------|-----|-------|--------|-----|
| US 05 | Ale | Slant | 200 ml | --- |
|-------|-----|-------|--------|-----|

### Extras

| Type  | Name         | Amount | Use for | Time   |
|-------|--------------|--------|---------|--------|
| Other | Łuska ryżowa | 150 g  | Boil    | 70 min |