

# Ordinary Bitter

- Gravity **9 BLG**
- ABV ---
- IBU **22**
- SRM **10.3**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **16.1 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **12.8 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC  |
|-------|----------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale          | 2 kg (62.3%)   | 80 %  | 7    |
| Grain | Strzegom Monachijski typ I | 1 kg (31.2%)   | 80 %  | 18   |
| Grain | Strzegom Karmel 150        | 0.2 kg (6.2%)  | 75 %  | 150  |
| Grain | Jęczmień palony            | 0.01 kg (0.3%) | 50 %  | 1000 |

## Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Minstrel | 30 g   | 60 min | 4.2 %      |
| Boil    | Minstrel | 20 g   | 15 min | 4.2 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 12 g   | Safale     |

## Extras

| Type        | Name | Amount | Use for | Time  |
|-------------|------|--------|---------|-------|
| Water Agent | Gips | 3 g    | Mash    | 0 min |

|        |            |     |      |        |
|--------|------------|-----|------|--------|
| Fining | Irish Moss | 5 g | Boil | 10 min |
|--------|------------|-----|------|--------|

## Notes

- Burzliwa 18oC 7 dni  
Ciacha 20oC 8 dni  
*Oct 28, 2016, 1:40 AM*