

# pszeniczny pilsik - no sparge

- Gravity **12.4 BLG**
- ABV ---
- IBU **64**
- SRM **3.5**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **6 %**
- Size with trub loss **19.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **22.1 liter(s)**

## Mash information

- Mash efficiency **64 %**
- Liquor-to-grist ratio **4.41 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **29.5 liter(s)**

## Fermentables

| Type  | Name                  | Amount         | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Pilzneński            | 2.5 kg (45.9%) | 81 %  | 4   |
| Grain | Pszenica niesłodowana | 1.7 kg (31.2%) | 75 %  | 3   |
| Grain | Słód pszeniczny       | 1 kg (18.3%)   | 82 %  | --- |
| Grain | łuska ryżowa          | 0.25 kg (4.6%) | 1 %   | 3   |

## Hops

| Use for             | Name  | Amount | Time   | Alpha acid |
|---------------------|---|--------|--------|------------|
| Boil                | lunga szyszka                                       | 20 g   | 60 min | 10 %       |
| Boil                | Magnat  | 20 g   | 55 min | 12 %       |
| Boil                | Marynka   | 12 g   | 15 min | 8 %        |
| Aroma (end of boil) | Marynka   | 15 g   | 5 min  | 8 %        |
| Aroma (end of boil) | Oktawia bardzo słaba goryczka mimo 7,8 alfa otwarta | 20 g   | 2 min  | 4 %        |
| Whirlpool           | relax   | 30 g   | 5 min  | 1 %        |

## Yeasts

| Name | Type  | Form | Amount | Laboratory |
|------|-------|------|--------|------------|
| w34  | Lager | Dry  | 11 g   | Safale     |

## Extras

| Type   | Name              | Amount | Use for   | Time     |
|--------|-------------------|--------|-----------|----------|
| Flavor | esencja chmielowa | 1 g    | Secondary | 1 day(s) |