

# Pils Niemiecki

---

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **35**
- SRM **4.2**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **68.4C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **1.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount      | Yield | EBC |
|-------|---------------------|-------------|-------|-----|
| Grain | Viking Pilsner malt | 3 kg (100%) | 82 %  | 4   |

## Hops

| Use for   | Name                | Amount | Time   | Alpha acid |
|-----------|---------------------|--------|--------|------------|
| Boil      | Lublin (Lubelski)   | 20 g   | 60 min | 4 %        |
| Boil      | Hallertauer tradion | 20 g   | 60 min | 4.2 %      |
| Whirlpool | Hallertauer tradion | 30 g   | 0 min  | 4.2 %      |

## Yeasts

| Name             | Type  | Form  | Amount | Laboratory |
|------------------|-------|-------|--------|------------|
| Saflager W 34/70 | Lager | Slant | 120 ml | Fermentis  |