

# Czeski niemiec

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **25**
- SRM **4.3**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.2 liter(s)**
- Total mash volume **9.6 liter(s)**

## Steps

- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **7.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **25 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński         | 2 kg (83.3%)   | 80 %  | 4   |
| Grain | Strzegom Monachijski typ I  | 0.3 kg (12.5%) | 79 %  | 16  |
| Grain | Weyermann - Acidulated Malt | 0.1 kg (4.2%)  | 80 %  | 6   |

## Hops

| Use for             | Name                  | Amount | Time   | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil                | Saaz (Czech Republic) | 15 g   | 60 min | 4.5 %      |
| Boil                | Saaz (Czech Republic) | 15 g   | 22 min | 4.5 %      |
| Aroma (end of boil) | Saaz (Czech Republic) | 10 g   | 0 min  | 4.5 %      |

## Yeasts

| Name          | Type  | Form | Amount | Laboratory                         |
|---------------|-------|------|--------|------------------------------------|
| Saflager S-23 | Lager | Dry  | 11 g   | Fermentis Division of S.I.Lesaffre |