

Pils Niemiecki

- Gravity **13.1 BLG**
- ABV ---
- IBU **28**
- SRM **4.6**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **27.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.9 liter(s)**
- Boil time **85 min**
- Evaporation rate **10 %/h**
- Boil size **36.1 liter(s)**

Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **20 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **24.3 liter(s)** of **76C** water or to achieve **36.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 5 kg (84.7%) | 83 % | 4 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (8.5%) | 80 % | 15 |
| Grain | Weyermann - Carapils | 0.3 kg (5.1%) | 79 % | 4 |
| Grain | zakwaszający Weyermann | 0.1 kg (1.7%) | 79 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Magnum | 30 g | 70 min | 10 % |
| Aroma (end of boil) | Hallertau Spalt Select | 10 g | 10 min | 4.2 % |
| Aroma (end of boil) | Hallertau Spalt Select | 20 g | 0 min | 4.2 % |

Yeasts

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

| | | | | |
|-----------------|-------|-------|--------|-----------|
| Saflager W34/70 | Lager | Slant | 200 ml | Fermentis |
|-----------------|-------|-------|--------|-----------|