# Niemiecki rauchpils

---

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **38**
- SRM **3.9**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **18.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **14.8 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **11.5 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **18.3 liter(s)** of wort

## Fermentables

| Type | Name | Amount | Yield | EBC |
|---|---|---|---|---|
| Grain | Pilzneński Steinbach | 2 kg *(60.6%)* | 81 % | 4 |
| Grain | Słód Wędzony Steinbach | 1.3 kg *(39.4%)* | 80 % | 5 |

## Hops

| Use for | Name | Amount | Time | Alpha acid |
|---|---|---|---|---|
| Boil | lunga | 15 g | 80 min | 11.5 % |
| Boil | Hallertau Mittelfruh | 10 g | 15 min | 6.1 % |
| Boil | Hallertau Mittelfruh | 10 g | 5 min | 6.1 % |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|---|---|---|---|---|
| Saflager W 34/70 | Lager | Dry | 8 g | Fermentis |

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.