

German Pils 12/21

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

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **65 min**
- Evaporation rate **13 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **29.7 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **24.3 liter(s)** of strike water to **68.9C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pilzneński | 5 kg (92.6%) | 81 % | 4 |
| Grain | Weyermann - Carapils | 0.4 kg (7.4%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------------|--------|--------|------------|
| Boil | lunga | 35 g | 60 min | 10 % |
| Aroma (end of boil) | Hallertau Tradition | 100 g | 0 min | 5.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 22 g | Fermentis |