

german pilsner

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **33**
- SRM **3.6**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **52 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **70 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **25 min** at **64C**
- Keep mash **30 min** at **70C**
- Keep mash **1 min** at **78C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|-------------|--------|-----|
| Grain | BESTMALZ - Best Pilsen | 6 kg (100%) | 80.5 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------------------|--------|--------|------------|
| Boil | Hallertau Tradition | 50 g | 60 min | 5 % |
| Boil | Tettnang | 25 g | 30 min | 4 % |
| Aroma (end of boil) | Hallertau Mittelfruh | 25 g | 10 min | 3 % |
| Aroma (end of boil) | Tettnang | 25 g | 5 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M84 Bohemian Lager | Lager | Dry | 22 g | Mangrove Jack's |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|-------------|-------|------|--------|
| Fining | whirlfloc T | 2.5 g | Boil | 10 min |
|--------|-------------|-------|------|--------|