

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **57**
- SRM **3.2**
- 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 **90 min**
- Evaporation rate **25 %/h**
- Boil size **31.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **21.6 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|-------------|-------|-----|
| Grain | Pilzneński Soufflet | 4 kg (100%) | 81 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------|--------|--------|------------|
| Boil | Hallertau Blanc | 20 g | 60 min | 11 % |
| Boil | Hallertau Blanc | 20 g | 20 min | 11 % |
| Boil | Hallertau Blanc | 20 g | 10 min | 11 % |
| Boil | Hallertau Blanc | 20 g | 5 min | 11 % |
| Aroma (end of boil) | Hallertau Blanc | 20 g | 0 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------|-------|------|--------|------------|
| Lallemand Diamond Lager | Lager | Dry | 11 g | --- |