

Full Aroma Hops

- Gravity **9.8 BLG**
- ABV ---
- IBU **43**
- SRM **3.8**
- Style **Blonde Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **61 C**, Time **15 min**
- Temp **71 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **67.8C**
- Add grains
- Keep mash **15 min** at **61C**
- Keep mash **45 min** at **71C**
- Keep mash **10 min** at **76C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|-------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 4 kg (100%) | 81 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Magnum | 15 g | 60 min | 13.5 % |
| Boil | Lublin (Lubelski) | 30 g | 30 min | 4.5 % |
| Boil | Lublin (Lubelski) | 15 g | 5 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |