

#8

- Gravity **12 BLG**
- ABV ---
- IBU **22**
- SRM **4.6**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **19.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

Steps

- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **7.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **19.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Weyermann - Pale Wheat Malt | 1 kg (40%) | 85 % | 5 |
| Grain | Weyermann - Pale Ale Malt | 0.75 kg (30%) | 85 % | 7 |
| Grain | Weyermann - Pilsner Malt | 0.5 kg (20%) | 81 % | 5 |
| Grain | Weyermann - Carapils | 0.25 kg (10%) | 80 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Aroma (end of boil) | Citra | 10 g | 10 min | 13.5 % |
| Aroma (end of boil) | Cascade | 10 g | 10 min | 6.8 % |
| Aroma (end of boil) | Citra | 10 g | 5 min | 13.5 % |
| Aroma (end of boil) | Cascade | 10 g | 5 min | 6.8 % |
| Whirlpool | Citra | 5 g | 0 min | 13.5 % |
| Whirlpool | Cascade | 5 g | 0 min | 6.8 % |
| Dry Hop | Citra | 25 g | 3 day(s) | 13.5 % |
| Dry Hop | Cascade | 25 g | 3 day(s) | 6.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|------|------|--------|------------|
| U.S. West Coast | Ale | Dry | 5 g | Gazdawa |