

## #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