

No1

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **77**
- SRM **5.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|---------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5 kg (87%) | 85 % | 7 |
| Grain | Weyermann - Light Munich Malt | 0.75 kg (13%) | 82 % | 14 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 15.8 % |
| Boil | Equinox | 20 g | 20 min | 16.1 % |
| Boil | Galaxy | 20 g | 20 min | 13.3 % |
| Aroma (end of boil) | Galaxy | 20 g | 5 min | 13.3 % |
| Aroma (end of boil) | Citra | 20 g | 5 min | 14.2 % |
| Whirlpool | Equinox | 20 g | --- | 16.1 % |
| Dry Hop | Equinox | 50 g | 4 day(s) | 13.1 % |
| Dry Hop | Galaxy | 20 g | 4 day(s) | 15 % |
| Dry Hop | Citra | 10 g | 4 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--------------|-----|-----|--------|-----------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |
|--------------|-----|-----|--------|-----------|