Bitter Lemon IPA

- Gravity 16.8 BLG
- ABV ----
- IBU **80**
- SRM 12.5
- Style American IPA

Batch size

- Expected quantity of finished beer 18 liter(s)
- Trub loss 5 %
- Size with trub loss 18.9 liter(s)
- · Boil time 60 min
- Evaporation rate 15 %/h
- Boil size 23.8 liter(s)

Mash information

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 16.2 liter(s)
- Total mash volume 21.6 liter(s)

Steps

- Temp 58 C, Time 5 min
 Temp 62 C, Time 30 min
 Temp 72 C, Time 60 min
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up 16.2 liter(s) of strike water to 64.3C
- Add grains
- Keep mash 5 min at 58C
- Keep mash 30 min at 62C
- Keep mash 60 min at 72C
- Keep mash 5 min at 76C
- Sparge using 13 liter(s) of 76C water or to achieve 23.8 liter(s) of wort

Fermentables

| Туре | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------------|--------|-----|
| Grain | Caramunich Malt | 0.2 kg <i>(3.7%)</i> | 71.7 % | 110 |
| Grain | Weyermann - Melanoiden Malt | 0.2 kg <i>(3.7%)</i> | 81 % | 53 |
| Grain | Weyermann - Pale Ale Malt | 2 kg (37%) | 85 % | 7 |
| Grain | Weyermann - Light Munich Malt | 2 kg (37%) | 82 % | 14 |
| Grain | Weyermann - Vienna Malt | 1 kg <i>(18.5%)</i> | 81 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Cascade | 40 g | 40 min | 6 % |
| Boil | Citra | 20 g | 30 min | 12 % |
| Aroma (end of boil) | Citra | 30 g | 15 min | 12 % |
| Aroma (end of boil) | Simcoe | 20 g | 15 min | 13 % |

Yeasts

| Name | Туре | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 12 g | Fermentis |

Extras

| Туре | Name | Amount | Use for | Time |
|-------|------------|--------|---------|--------|
| Spice | Lemon Peel | 15 g | Boil | 15 min |
| Herb | Coriander | 5 g | Boil | 30 min |