

Tropicales

- Gravity **18.7 BLG**
- ABV **8.1 %**
- IBU **22**
- SRM **5.4**
- Style **Premium American Lager**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **44.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **40 liter(s)**
- Total mash volume **53.3 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **40 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **44.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 10 kg (75%) | 80 % | 5 |
| Grain | Viking Pilsner malt | 1.33 kg (10%) | 82 % | 4 |
| Grain | Weyermann - Carapils | 1 kg (7.5%) | 78 % | 4 |
| Grain | Viking Wheat Malt | 1 kg (7.5%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|---------|----------|------------|
| Boil | Warrior | 20 g | 60 min | 15.5 % |
| Boil | Galaxy | 10 g | 15 min | 15 % |
| Boil | Mosaic | 10 g | 10 min | 10 % |
| Aroma (end of boil) | Galaxy | 33.33 g | 1 min | 15 % |
| Dry Hop | Galaxy | 33.33 g | 7 day(s) | 15 % |
| Dry Hop | Mosaic | 33.33 g | 5 day(s) | 10 % |
| Dry Hop | Galaxy | 33.33 g | 3 day(s) | 15 % |

Yeasts

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

| | | | | |
|--------------|-----|-----|---------|-----------|
| Safale US-05 | Ale | Dry | 16.67 g | Fermentis |
|--------------|-----|-----|---------|-----------|

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|--------|
| Fining | mech irlandzki | 1.67 g | Boil | 15 min |
| Water Agent | gips piwowarski | 1.67 g | Mash | 60 min |