

Forest

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **38**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 3 kg (46.2%) | 82 % | 4 |
| Grain | Viking Pale Ale malt | 2.5 kg (38.5%) | 80 % | 5 |
| Grain | Viking Wheat Malt | 1 kg (15.4%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 15.5 % |
| Whirlpool | Ahtanum | 20 g | 0 min | 5 % |
| Boil | lunga | 15 g | 30 min | 11 % |
| Dry Hop | Sorachi Ace | 25 g | 3 day(s) | 10 % |
| Dry Hop | Mosaic | 20 g | 3 day(s) | 10 % |
| Dry Hop | Citra | 20 g | 3 day(s) | 12 % |