

Forest IPA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **54**
- SRM **4.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.9 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **73 C**, Time **10 min**

Mash step by step

- Heat up **21.8 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **73C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pilzneński | 5 kg (66.7%) | 81 % | 4 |
| Grain | Viking Pale Ale malt | 2 kg (26.7%) | 80 % | 5 |
| Grain | Weyermann - Carapils | 0.5 kg (6.7%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Magnum | 30 g | 60 min | 13.5 % |
| Aroma (end of boil) | Idaho 7 | 50 g | 5 min | 12.7 % |
| Aroma (end of boil) | Simcoe | 50 g | 5 min | 13.2 % |
| Dry Hop | Idaho 7 | 50 g | 5 day(s) | 12.7 % |
| Dry Hop | Simcoe | 100 g | 5 day(s) | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------|------|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale | Slant | 200 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------|--------|---------|-------|
| Flavor | Pędy sosny | 50 g | Boil | 1 min |