

Forest IPA

- Gravity **14.5 BLG**
- ABV ---
- IBU **76**
- SRM **9.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **4 %**
- Size with trub loss **26.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **55 C**, Time **10 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **60 min** at **69C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 5.5 kg (82.1%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (7.5%) | 79 % | 22 |
| Grain | Weyermann - Melanoiden Malt | 0.5 kg (7.5%) | 81 % | 60 |
| Grain | Pszeniczny | 0.2 kg (3%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 30 g | 60 min | 15.7 % |
| Boil | Simcoe | 30 g | 20 min | 11.4 % |
| Boil | Simcoe | 30 g | 10 min | 11.4 % |
| Boil | Simcoe | 20 g | 5 min | 11.4 % |
| Whirlpool | Simcoe | 20 g | 40 min | 11.4 % |
| Dry Hop | Cascade | 50 g | 4 day(s) | 7.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 30 g | Fermentis |