

Kangur Jack

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **89**
- SRM **14.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **16.4 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|--------|-----|
| Grain | Weyermann - Pale Ale Malt | 5 kg (91.7%) | 85 % | 7 |
| Grain | Caraaroma | 0.25 kg (4.6%) | 78 % | 400 |
| Grain | Special B Malt | 0.2 kg (3.7%) | 65.2 % | 315 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 30 g | 60 min | 15.5 % |
| Boil | Fuggles | 30 g | 60 min | 4.5 % |
| Boil | Green Bullet | 30 g | 30 min | 11 % |
| Aroma (end of boil) | Sorachi Ace | 15 g | 1 min | 10 % |
| Aroma (end of boil) | Kohatu | 15 g | 1 min | 7.8 % |
| Dry Hop | Sorachi Ace | 15 g | 3 day(s) | 10 % |
| Dry Hop | Kohatu | 15 g | 3 day(s) | 7.8 % |
| Dry Hop | Galaxy | 60 g | 3 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 15 g | Safale |