

GIEKON XXI (IPA)

- Gravity **16.4 BLG**
- ABV ---
- IBU **60**
- SRM **7.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **65 C**, Time **90 min**
- Temp **70 C**, Time **10 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **10 min** at **70C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|---------------|-------|-----|
| Grain | Monachijski Ciemny Steinbach | 0.3 kg (4.6%) | 100 % | 30 |
| Grain | Briess - Pale Ale Malt | 6 kg (92.3%) | 80 % | 7 |
| Grain | Karmelowy Czerwony | 0.2 kg (3.1%) | 75 % | 59 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 35 g | 90 min | 15.5 % |
| Aroma (end of boil) | Cascade | 40 g | 5 min | 6 % |
| Whirlpool | Centennial | 30 g | 5 min | 10.5 % |
| Dry Hop | Amarillo | 20 g | 7 day(s) | 9.5 % |
| Dry Hop | Cascade | 40 g | 5 day(s) | 6 % |
| Dry Hop | Amarillo | 25 g | 3 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|------|--------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale | Liquid | 100 ml | Mangrove Jack's |