

# 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