

GIEKON IV

- Gravity **11.5 BLG**
- ABV ---
- IBU **24**
- SRM **35.5**
- Style **Schwarzbier**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **24.9 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **20.8 liter(s)** of strike water to **68.4C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (60.2%)	81 %	4
Grain	Monachijski	1.1 kg (26.5%)	80 %	16
Grain	Czekoladowy	0.25 kg (6%)	68 %	1200
Grain	Strzegom Karmel 150	0.15 kg (3.6%)	75 %	150
Grain	Strzegom Karmel 600	0.15 kg (3.6%)	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	25 g	50 min	5.5 %
Aroma (end of boil)	Marynka	20 g	10 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
safbrew T-58	Ale	Dry	11.5 g	Safale

Extras

Type	Name	Amount	Use for	Time
Other	płatki wiśniowe	10 g	Boil	20 min
Spice	kolendra	10 g	Boil	10 min
Spice	gałka muszkatałowa	10 g	Boil	10 min
Spice	kardamon	10 g	Boil	10 min
Flavor	skórka z pomarańczy	10 g	Boil	10 min