Galaxy Citra Black IPA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **49**
- SRM **27.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.375 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15.5 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **7.5 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg *(70.4%)*	81 %	4
Grain	Abbey Malt Weyermann	0.35 kg *(9.9%)*	75 %	45
Grain	Płatki owsiane	0.4 kg *(11.3%)*	65 %	3
Grain	Strzegom Karmel 150	0.1 kg *(2.8%)*	75 %	150
Grain	Weyermann - Carafa III Special	0.2 kg *(5.6%)*	35 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	20 g	60 min	6.7 %
Boil	Mosaic	10 g	5 min	10 %
Boil	Citra	25 g	5 min	12.8 %
Boil	Simcoe	25 g	5 min	13.2 %
Dry Hop	Galaxy	50 g	3 day(s)	15.5 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
FM10 O czym szumią wierzby	Ale	Liquid	100 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Spice	Kaffir	2 g	Boil	7 min
Spice	Skórka z pomarańczy (świeża)	40 g	Boil	7 min