

# Black IPA z Marxam

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **53**
- SRM **28.1**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.6 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 **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (76.9%)	81 %	4
Grain	Strzegom Karmel 150	0.5 kg (7.7%)	75 %	150
Grain	Biscuit Malt	0.5 kg (7.7%)	79 %	45
Grain	Carafa II	0.5 kg (7.7%)	70 %	812

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	25 g	60 min	10.5 %
Boil	Cascade	25 g	45 min	6 %
Boil	Willamette	25 g	15 min	5 %
Aroma (end of boil)	Cascade	25 g	20 min	6 %
Dry Hop	Cascade	50 g	5 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

## Notes

- Carafa II dodana po zacieraniu.  
F. burzliwa 14 dni 17-19C  
F. cicha 7 dni 19-21C  
Na 5 dni Cascade 50g.  
*Jan 8, 2023, 10:52 AM*