

# WAGABUNDA & GOLEM - BGM 19

- Gravity **14.5 BLG**
- ABV ---
- IBU **31**
- SRM **41.2**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **240 liter(s)**
- Trub loss **5 %**
- Size with trub loss **252 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **277.2 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **195.6 liter(s)**
- Total mash volume **273.9 liter(s)**

## Steps

- Temp **63 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **195.6 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **15 min** at **63C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **159.9 liter(s)** of **76C** water or to achieve **277.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Pilsen	25 kg (31.9%)	80.5 %	4
Grain	Weyermann - Smoked Malt	25 kg (31.9%)	81 %	6
Grain	BESTMALZ - Best Minich	12.5 kg (16%)	80.5 %	16
Grain	BESTMALZ - Best Wheat Malt	5 kg (6.4%)	82 %	4
Grain	Fawcett - Pale Chocolate	2.5 kg (3.2%)	71 %	600
Grain	Weyermann - Carafa I	3.5 kg (4.5%)	70 %	800
Grain	Weyermann - Dehusked Carafa II	2 kg (2.6%)	70 %	1100
Grain	Weyermann - Dehusked Carafa III	2.75 kg (3.5%)	70 %	1300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	200 g	50 min	10 %

Boil	Marynka	200 g	30 min	10 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	4000 ml	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Flavor	Lukrecja	165 g	Boil	50 min
Flavor	Kozieradka	200 g	Boil	20 min
Flavor	Cynamon	440 g	Boil	20 min
Flavor	Habanero 8 szt.	100 g	Boil	1 min