

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 % |
|------|---------|-------|--------|------|

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 |