

# #68 DDH Bourbon Barrel Aged Salty Garlic & Cocoa American Black Grodziskie

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **21**
- SRM **20.2**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

## Fermentables

| Type  | Name                               | Amount        | Yield | EBC |
|-------|------------------------------------|---------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 3 kg (85.7%)  | 80 %  | 3   |
| Grain | Carafa                             | 0.3 kg (8.6%) | 70 %  | 800 |
| Grain | Caramel/Crystal Malt - 10L         | 0.2 kg (5.7%) | 75 %  | 10  |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Amarillo | 10 g   | 60 min   | 9.5 %      |
| Boil    | Amarillo | 15 g   | 10 min   | 9.5 %      |
| Boil    | Amarillo | 25 g   | 0 min    | 9.5 %      |
| Dry Hop | Summit   | 50 g   | 7 day(s) | 15 %       |
| Dry Hop | Summit   | 50 g   | 4 day(s) | 15 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | ---        |

## Extras

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

| Type   | Name           | Amount | Use for   | Time      |
|--------|----------------|--------|-----------|-----------|
| Flavor | Płatki Bourbon | 25 g   | Secondary | 14 day(s) |
| Flavor | Sól czosnkowa  | 9 g    | Boil      | 30 min    |
| Flavor | Kakao          | 20 g   | Boil      | 10 min    |