

## End Game

---

- Gravity **24 BLG**
- ABV **11 %**
- IBU **116**
- SRM **61.1**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **4 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **1.75 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **33 liter(s)**

### Steps

- Temp **65 C**, Time **40 min**
- Temp **69 C**, Time **50 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **77.9C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **50 min** at **69C**
- Keep mash **30 min** at **72C**
- Sparge using **20.9 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

### Fermentables

| Type  | Name                    | Amount        | Yield  | EBC  |
|-------|-------------------------|---------------|--------|------|
| Grain | Pale Ale                | 7.8 kg (65%)  | 80 %   | 7    |
| Grain | Płatki pszeniczne       | 1.2 kg (10%)  | 85 %   | 3    |
| Grain | cookie                  | 0.3 kg (2.5%) | 80 %   | 50   |
| Grain | Carafa III              | 0.5 kg (4.2%) | 70 %   | 1034 |
| Grain | Special B Malt          | 0.6 kg (5%)   | 65.2 % | 315  |
| Grain | special w               | 0.6 kg (5%)   | 65 %   | 300  |
| Grain | Briess - Chocolate Malt | 0.6 kg (5%)   | 60 %   | 690  |
| Grain | Jęczmień palony         | 0.4 kg (3.3%) | 55 %   | 985  |

### Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Galena | 150 g  | 60 min | 12 %       |

### Yeasts

| Name                           | Type | Form   | Amount | Laboratory |
|--------------------------------|------|--------|--------|------------|
| WLP007 - Dry English Ale Yeast | Ale  | Liquid | 300 ml | White Labs |

## Extras

| Type   | Name                                | Amount | Use for   | Time     |
|--------|-------------------------------------|--------|-----------|----------|
| Flavor | kokos                               | 50 g   | Secondary | 7 day(s) |
| Flavor | tonka                               | 50 g   | Secondary | 7 day(s) |
| Flavor | płatki dębowe amerykańskie (koniak) | 50 g   | Secondary | 7 day(s) |

## Notes

- <https://www.piwo.org/forums/topic/14390-alderaan-brewery/page/15/?tab=comments#comment-501581>  
*Sep 3, 2019, 9:04 PM*