

## #9 Bulgot smoły

- Gravity **24.4 BLG**
- ABV **11.3 %**
- IBU **88**
- SRM **39.8**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.15 liter(s) / kg**
- Mash size **19.7 liter(s)**
- Total mash volume **28.8 liter(s)**

### Fermentables

| Type           | Name                                 | Amount         | Yield | EBC  |
|----------------|--------------------------------------|----------------|-------|------|
| Grain          | Strzegom Pale Ale (Polska)           | 5 kg (46.1%)   | 79 %  | 6    |
| Grain          | Pale Cara 9EBC (Anglia)              | 1 kg (9.2%)    | 30 %  | 9    |
| Grain          | Słód Wędzony Steinbach (Niemcy)      | 1 kg (9.2%)    | 80 %  | 5    |
| Grain          | Słód owsiany Fawcett (Anglia)        | 1 kg (9.2%)    | 61 %  | 4    |
| Grain          | Strzegom Czekoladowy 400 (Polska)    | 0.75 kg (6.9%) | 68 %  | 400  |
| Grain          | Strzegom Czekoladowy ciemny (Polska) | 0.4 kg (3.7%)  | 68 %  | 1200 |
| Liquid Extract | WES ekstrakt słodowy jasny           | 1.7 kg (15.7%) | 80 %  | 45   |

### Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Simcoe   | 80 g   | 60 min   | 13.1 %     |
| Aroma (end of boil) | Amarillo | 25 g   | 40 min   | 8.8 %      |
| Aroma (end of boil) | Olicana  | 25 g   | 20 min   | 6.9 %      |
| Dry Hop             | Simcoe   | 20 g   | 7 day(s) | 13.1 %     |
| Dry Hop             | Amarillo | 15 g   | 7 day(s) | 8.8 %      |
| Dry Hop             | Olicana  | 15 g   | 7 day(s) | 6.9 %      |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|  |     |     |      |                 |
|--|-----|-----|------|-----------------|
| Mangrove Jack's M42 New World Strong Ale | Ale | Dry | 20 g | Mangrove Jack's |
|--|-----|-----|------|-----------------|

### Extras

| Type   | Name               | Amount | Use for   | Time     |
|--------|--------------------|--------|-----------|----------|
| Flavor | Śliwki suszone     | 200 g  | Boil      | 60 min   |
| Flavor | Papryczki peperoni | 20 g   | Boil      | 15 min   |
| Flavor | Płatki Bourbon     | 50 g   | Secondary | 7 day(s) |
| Other  | Laktoza            | 500 g  | Boil      | 15 min   |