

# RIS

- Gravity **20.9 BLG**
- ABV **9.3 %**
- IBU **55**
- SRM **42.4**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **130 min**
- Evaporation rate **10 %/h**
- Boil size **19.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **66 C**, Time **70 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **19.6 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC  |
|-------|------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 4.1 kg (68.3%) | 80 %  | 7    |
| Grain | Jęczmień palony        | 0.3 kg (5%)    | 55 %  | 985  |
| Grain | Czekoladowy            | 0.25 kg (4.2%) | 60 %  | 788  |
| Grain | Karmelowy Jasny 30EBC  | 0.3 kg (5%)    | 75 %  | 30   |
| Grain | Carafa II              | 0.05 kg (0.8%) | 70 %  | 812  |
| Grain | Carafa III             | 0.05 kg (0.8%) | 70 %  | 1034 |
| Grain | Strzegom Karmel 300    | 0.15 kg (2.5%) | 70 %  | 299  |
| Grain | Płatki owsiane         | 0.5 kg (8.3%)  | 85 %  | 3    |
| Sugar | Cukier trzcinowy       | 0.3 kg (5%)    | --- % | ---  |

## Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Marynka  | 30 g   | 80 min | 10 %       |
| Boil    | Premiant | 20 g   | 40 min | 8 %        |
| Boil    | Premiant | 10 g   | 10 min | 8 %        |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 12 g   | Safale     |

## Extras

| Type   | Name         | Amount | Use for   | Time     |
|--------|--------------|--------|-----------|----------|
| Flavor | kawa mielona | 100 g  | Secondary | 7 day(s) |