

# Owsiano-kawowy/kakaowy Stout

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **15**
- SRM **32.2**
- Style **Oatmeal Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **7 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **48 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **52.7C**
- Add grains
- Keep mash **15 min** at **48C**
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **72C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount       | Yield | EBC  |
|-------|-----------------------|--------------|-------|------|
| Grain | Pilzneński            | 2.5 kg (40%) | 81 %  | 4    |
| Grain | Słód owsiany Fawcett  | 2 kg (32%)   | 61 %  | 5    |
| Grain | Słód czekoladowy      | 0.25 kg (4%) | 68 %  | 900  |
| Grain | Carafa                | 0.25 kg (4%) | 70 %  | 1050 |
| Grain | Słód Kawowy Ciemny    | 0.25 kg (4%) | 70 %  | 500  |
| Grain | Jęczmień palony       | 0 kg         | 55 %  | 985  |
| Grain | Płatki owsiane        | 0.5 kg (8%)  | 85 %  | 3    |
| Grain | Karmelowy Jasny 30EBC | 0.5 kg (8%)  | 75 %  | 30   |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | Spält | 35 g   | 30 min | 5.5 %      |

## Yeasts

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

|                           |     |        |         |                  |
|---------------------------|-----|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 1000 ml | Fermentum Mobile |
|---------------------------|-----|--------|---------|------------------|

### Extras

| Type  | Name                | Amount | Use for  | Time  |
|-------|---------------------|--------|----------|-------|
| Other | Kawa - do ustalenia | 300 g  | Bottling | 2 min |
| Other | Kakao               | 100 g  | Bottling | ---   |