

# stal

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **26**
- SRM **26.4**
- Style **Oatmeal Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **65 C**, Time **10 min**
- Temp **67 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **10 min** at **65C**
- Keep mash **35 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                         | Amount         | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Monachijski Ciemny Steinbach | 0.6 kg (9.1%)  | 100 % | 30  |
| Grain | Viking Pale Ale malt         | 4 kg (60.6%)   | 80 %  | 5   |
| Grain | Strzegom Karmel 30           | 1.3 kg (19.7%) | 75 %  | 30  |
| Grain | Jęczmień palony              | 0.2 kg (3%)    | 55 %  | 985 |
| Grain | Strzegom Czekoladowy 400     | 0.5 kg (7.6%)  | 68 %  | 400 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Tomyski | 30 g   | 40 min | 2.8 %      |
| Boil    | Nugget  | 30 g   | 15 min | 13 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |

## 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 | laktoza | 400 g  | Boil    | 20 min |