

Dry stout

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **38.4**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **11.6 liter(s)**
- Total mash volume **14.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **11.6 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **6.5 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|--------------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt | 2.45 kg (81.7%) | 80 % | 5 |
| Grain | Jęczmień palony | 0.25 kg (8.3%) | 55 % | 985 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (6.7%) | 68 % | 1200 |
| Adjunct | Briess - Barley Flakes | 0.1 kg (3.3%) | 70 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|----------|------------|
| Boil | Magnum | 4 g | 60 min | 13.5 % |
| Boil | East Kent Goldings | 10 g | 10 min | 5.1 % |
| Boil | East Kent Goldings | 15 g | 5 min | 5.1 % |
| Boil | Centennial | 20 g | 5 min | 10.5 % |
| Dry Hop | Centennial | 30 g | 3 day(s) | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 5 g | Fermentis |

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type | Name | Amount | Use for | Time |
|-------|-------|--------|---------|--------|
| Spice | kakao | 25 g | Mash | 60 min |