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

| Туре | Name | Amount | Yield | EBC |
|---------|--------------------------------|------------------------|-------|------|
| Grain | Viking Pale Ale malt | 2.45 kg <i>(81.7%)</i> | 80 % | 5 |
| Grain | Jęczmień palony | 0.25 kg <i>(8.3%)</i> | 55 % | 985 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg <i>(6.7%)</i> | 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 | Туре | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 5 g | Fermentis |

Extras

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