mikkpdswiatecale

- Gravity 17.3 BLG
- ABV 7.4 %
- IBU **28**
- SRM **30.1**
- Style Christmas/Winter Specialty Spiced Beer

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 21.3 liter(s)
- Total mash volume 28.4 liter(s)

Steps

- Temp **64 C**, Time **45 min** Temp **72 C**, Time **30 min**
- Temp 76 C, Time 0 min

Mash step by step

- Heat up 21.3 liter(s) of strike water to 71.3C
- Add grains
- Keep mash 45 min at 64C
- Keep mash 30 min at 72C
- Keep mash 0 min at 76C
- Sparge using 11.1 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

Fermentables

| Туре | Name | Amount | Yield | EBC |
|-------|----------------------|---------------------|-------|------|
| Grain | Viking Pale Ale malt | 4 kg <i>(56.3%)</i> | 80 % | 5 |
| Grain | Smoked Malt | 2 kg (28.2%) | 80 % | 18 |
| Grain | Jęczmień palony | 0.2 kg (2.8%) | 55 % | 1200 |
| Grain | Carafa | 0.2 kg (2.8%) | 70 % | 800 |
| Grain | Caraaroma | 0.3 kg (4.2%) | 78 % | 400 |
| Grain | Płatki owsiane | 0.4 kg (5.6%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | Aurora | 30 g | 50 min | 8.5 % |
| Boil | Styrian Golding | 45 g | 10 min | 3.6 % |

Yeasts

| Name | Туре | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Safale |

Extras

| Туре | Name | Amount | Use for | Time |
|-------|----------------|--------|---------|--------|
| Spice | wędzone śliwki | 1000 g | Boil | 15 min |