

Ho Ho Ho

- Gravity **17.1 BLG**
- ABV ---
- IBU **45**
- SRM **62.5**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **11.2 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **10 min** at **72C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale | 2 kg (62.5%) | 79 % | 6 |
| Grain | Strzegom Czekoladowy 1200 | 0.2 kg (6.3%) | 68 % | 1202 |
| Grain | Caraaroma | 0.5 kg (15.6%) | 78 % | 400 |
| Grain | Weyermann - Melanoiden Malt | 0.5 kg (15.6%) | 81 % | 53 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 10 % |
| Boil | Lublin (Lubelski) | 30 g | 5 min | 4 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|-------|--------------------|--------|---------|--------|
| Spice | Miód wielokwiatowy | 200 g | Boil | 10 min |

| | | | | |
|--------|--------------------------|-------|------|--------|
| Spice | przyprawa do piernika | 20 g | Boil | 10 min |
| Flavor | wanilia | 0.5 g | Boil | 10 min |
| Spice | korzeń lukrecji | 10 g | Boil | 5 min |
| Spice | skórki pomarańczy | 10 g | Boil | 10 min |
| Spice | anyż | 3 g | Boil | 5 min |