

Xmas Ale

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **16**
- SRM **21.3**
- 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 **3.25 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.1 liter(s)** of strike water to **75.4C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **5.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Simpsons - Maris Otter | 2.5 kg (80.6%) | 81 % | 6 |
| Grain | Caramel/Crystal Malt - 80L | 0.5 kg (16.1%) | 74 % | 158 |
| Grain | Czekoladowy | 0.1 kg (3.2%) | 60 % | 788 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|---------|--------|------------|
| Boil | East Kent Goldings | 10.53 g | 60 min | 5.1 % |
| Boil | East Kent Goldings | 10.53 g | 15 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 5.79 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|-------|----------------|--------|---------|--------|
| Spice | Laski cynamonu | 2.11 g | Boil | 10 min |
| Spice | Wanilia | 0.53 g | Boil | 10 min |

| | | | | |
|-------|--------------------|--------|------|--------|
| Spice | Ziele angielskie | 3.68 g | Boil | 10 min |
| Spice | Gałka muszkatołowa | 0.53 g | Boil | 10 min |
| Spice | Ziarna kolendry | 4.21 g | Boil | 10 min |
| Spice | Kardamon | 1 g | Boil | 10 min |