

Xmas Ale

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **36**
- SRM **17.9**
- 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.4 liter(s)**
- Total mash volume **17.8 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **13.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **20 min** at **72C**
- Sparge using **3.8 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------|----------------|--------|-----|
| Grain | Monachijski | 2.3 kg (51.7%) | 80 % | 16 |
| Grain | Pilzneński | 1.7 kg (38.2%) | 81 % | 4 |
| Grain | Special B Malt | 0.25 kg (5.6%) | 65.2 % | 315 |
| Grain | Biscuit Malt | 0.2 kg (4.5%) | 79 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 20 g | 60 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| Danstar Belle Saison | Ale | Slant | 500 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-------------------------------|--------|---------|--------|
| Spice | Przyprawa do piernika Delecta | 15 g | Boil | 10 min |