

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