

Xmas

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **16**
- SRM **12.2**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **12 %/h**
- Boil size **28 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

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

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **28 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Golden Promise	3 kg (62.5%)	81 %	6
Grain	Oats, Flaked	1 kg (20.8%)	80 %	4
Grain	Caraaroma	0.3 kg (6.3%)	78 %	400
Liquid Extract	Miód Gryczany (Buckwheat Honey)	0.5 kg (10.4%)	70 %	40

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	31 g	60 min	4.9 %