

## X-mass 2020 - projekt

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- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **40**
- SRM **45.9**
- Style **Christmas/Winter Specialty Spiced Beer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.1 liter(s)**
- Total mash volume **32.1 liter(s)**

### Steps

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

### Mash step by step

- Heat up **24.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	wędzony dębem	2 kg (24.9%)	82 %	10
Grain	Weyermann pszeniczny jasny	1 kg (12.5%)	80 %	6
Grain	Biscuit Malt	1 kg (12.5%)	79 %	45
Grain	Żytni	0.5 kg (6.2%)	85 %	8
Grain	Carafa special	0.5 kg (6.2%)	70 %	900
Grain	Fawcett - Pale Chocolate	0.2 kg (2.5%)	71 %	600
Grain	Strzegom Monachijski typ I	1.3 kg (16.2%)	79 %	16
Grain	Strzegom Czekoladowy 1200	0.13 kg (1.6%)	68 %	1202
Grain	Jęczmień palony	0.3 kg (3.7%)	55 %	985
Grain	Słód Caramunich Typ II Weyermann	0.4 kg (5%)	73 %	120
Grain	Płatki pszeniczne	0.5 kg (6.2%)	85 %	3
Grain	Płatki owsiane	0.2 kg (2.5%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %

Boil	lunga	20 g	20 min	11 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Irish Ale	Ale	Liquid	200 ml	Wyeast Labs

### Extras

Type	Name	Amount	Use for	Time
Spice	Tonka	15 g	Secondary	2 day(s)
Spice	Płatki	50 g	Secondary	30 day(s)
Spice	cynamon	40 g	Secondary	2 day(s)