

# Dziadek mróz

- Gravity **15 BLG**
- ABV ---
- IBU **25**
- SRM **33.6**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **22.2 liter(s)**

## Steps

- Temp **53 C**, Time **15 min**
- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom czekoladowy ciemny	0.2 kg (4%)	--- %	1200
Grain	Pilzneński	3 kg (60.7%)	--- %	4
Grain	Strzegom monachijski typ II	1 kg (20.2%)	--- %	20
Grain	Strzegom pszeniczny karmelowy	0.5 kg (10.1%)	--- %	125
Grain	Strzegom karmel 300	0.24 kg (4.9%)	--- %	299

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew Abbey	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon	10 g	Boil	10 min
Spice	Kardamon	5 g	Boil	10 min
Spice	Goździki	10 g	Boil	10 min
Spice	Anyż	3 g	Boil	10 min
Spice	Ziele Angielskie	4 g	Boil	10 min
Spice	Pieprz	4 g	Boil	10 min
Fining	Mech Irlandzki	6 g	Boil	10 min
Spice	Płatki dębowe mocno opiekane	20 g	Secondary	14 day(s)