

# karmelek

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **49**
- SRM **12**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (61.2%)	80 %	4
Grain	Karmelowy Czerwony	0.3 kg (6.1%)	75 %	40
Grain	Strzegom Karmel 600	0.2 kg (4.1%)	68 %	601
Grain	Jęczmień niesłodowany	0.4 kg (8.2%)	75 %	2
Grain	Monachijski	1 kg (20.4%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	20 g	60 min	9.5 %
Boil	Mosaic	20 g	30 min	12 %
Aroma (end of boil)	Mosaic	20 g	10 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	12 g	---

## Extras

Type	Name	Amount	Use for	Time
Herb	mech irlandzki	10 g	Boil	10 min