

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 |