

## xmas

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **44**
- SRM **27.3**
- Style **Christmas/Winter Specialty Spiced Beer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.6 liter(s)**
- Total mash volume **23.4 liter(s)**

### Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński         | 3.5 kg (59.8%) | 80 %  | 4    |
| Grain | Pszeniczny                  | 1 kg (17.1%)   | 85 %  | 4    |
| Grain | cookie                      | 0.4 kg (6.8%)  | 70 %  | 50   |
| Grain | Caraaroma                   | 0.2 kg (3.4%)  | 78 %  | 400  |
| Grain | Carafa III                  | 0.25 kg (4.3%) | 70 %  | 1034 |
| Grain | Strzegom Monachijski typ II | 0.2 kg (3.4%)  | 79 %  | 22   |
| Grain | Strzegom Czekoladowy jasny  | 0.3 kg (5.1%)  | 68 %  | 400  |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 30 g   | 60 min | 7.5 %      |
| Boil    | Marynka | 15 g   | 30 min | 7.5 %      |
| Boil    | Marynka | 15 g   | 5 min  | 7.5 %      |
| Boil    | Cascade | 15 g   | 30 min | 6.5 %      |
| Boil    | Cascade | 15 g   | 5 min  | 6.5 %      |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| t-58 | Ale  | Dry  | 11.5 g | ---        |

### Extras

| Type  | Name              | Amount | Use for | Time   |
|-------|-------------------|--------|---------|--------|
| Spice | Cardamom, Green   | 5 g    | Boil    | 15 min |
| Spice | goździk           | 5 g    | Boil    | 15 min |
| Spice | skórki pomarańczy | 30 g   | Boil    | 60 min |

|       |                |       |      |        |
|-------|----------------|-------|------|--------|
| Spice | śliwka suszona | 300 g | Boil | 30 min |
| Spice | cynamon        | 15 g  | Boil | 50 min |
| Spice | wanilia        | 2 g   | Boil | 50 min |

## Notes

- Gęstość przed zadaniem drożdży 16 BLG.  
*Nov 25, 2017, 1:56 PM*