

święteczne???

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **38**
- SRM **22.1**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **19.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.1 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|-------|------|
| Grain | Pilzneński | 3 kg (62.5%) | 81 % | 4 |
| Grain | Monachijski | 1 kg (20.8%) | 80 % | 16 |
| Grain | Płatki owsiane | 0.4 kg (8.3%) | 85 % | 3 |
| Grain | Strzegom Karmel 600 | 0.1 kg (2.1%) | 68 % | 601 |
| Sugar | Cane (Beet) Sugar | 0.1 kg (2.1%) | 100 % | 0 |
| Grain | Carafa II | 0.1 kg (2.1%) | 70 % | 812 |
| Grain | Carafa III | 0.1 kg (2.1%) | 70 % | 1034 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Galaxy | 20 g | 60 min | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------|------|-------|--------|------------|
| hot head | Ale | Slant | 500 ml | Omega |

Extras

| Type | Name | Amount | Use for | Time |
|-------|--------------------|--------|---------|--------|
| Spice | Cynamon | 5 g | Boil | 10 min |
| Spice | Ekstrakt waniliowy | 10 g | Boil | 10 min |
| Spice | Skórka pomarańczy | 20 g | Boil | 10 min |
| Spice | Gozdziki | 5 g | Boil | 10 min |
| Spice | Śliwki suszone | 200 g | Boil | 10 min |
| Spice | Kardamon | 5 g | Boil | 10 min |