

Murzynowo

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **28**
- SRM **43.1**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|--------------|-------|------|
| Grain | Strzegom Pilzneński | 3 kg (60%) | 80 % | 4 |
| Grain | Weyermann - Pilsner Malt | 0.5 kg (10%) | 81 % | 5 |
| Grain | Weyermann - Carafa I special | 0.5 kg (10%) | 70 % | 690 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.4 kg (8%) | 73 % | 1001 |
| Grain | crystal 160 ebc | 0.3 kg (6%) | 78 % | 160 |
| Grain | Carafa II special | 0.2 kg (4%) | 70 % | 812 |
| Grain | Jęczmień palony | 0.1 kg (2%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil | Simcoe | 10 g | 60 min | 13.2 % |
| Aroma (end of boil) | Mosaic | 10 g | 10 min | 12 % |
| Aroma (end of boil) | Simcoe | 20 g | 10 min | 13.2 % |
| Aroma (end of boil) | Simcoe | 30 g | 0 min | 13.2 % |
| Aroma (end of boil) | Mosaic | 30 g | 0 min | 12 % |
| Dry Hop | Mosaic | 60 g | 1 day(s) | 12 % |