

Milky Way

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **26**
- SRM **30.8**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.9 liter(s)**
- Total mash volume **11.9 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **8.9 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 2 kg (67.1%) | 80 % | 5 |
| Grain | Pszeniczny | 0.25 kg (8.4%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.25 kg (8.4%) | 85 % | 3 |
| Grain | Carahell | 0.1 kg (3.4%) | 77 % | 26 |
| Grain | Brown | 0.15 kg (5%) | 72 % | 200 |
| Grain | Bestmatz Czekoladowy 1200 | 0.13 kg (4.4%) | 68 % | 1200 |
| Grain | Jęczmień palony | 0.1 kg (3.4%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 10 g | 60 min | 12.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------|------|-------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Slant | 100 ml | Fermentum Mobile |

Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|---------|-------|
| Flavor | laktoza | 300 g | Boil | 5 min |