



Standard Specification for Laboratory Glass Multiple Neck Distilling/Boiling Flasks¹

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1. Scope

1.1 This specification provides standard dimensional requirements for multiple neck distilling/boiling flasks.

2. Referenced Documents

2.1 ASTM Standards:

- E 438 Specification for Glasses in Laboratory Apparatus²
- E 671 Specification for Maximum Permissible Thermal Residual Stress in Annealed Glass Laboratory Apparatus²
- E 676 Specification for Interchangeable Taper-Ground Joints²
- E 920 Specification for Commercially Packaged Laboratory Apparatus²
- E 921 Specification for Export Packaged Laboratory Apparatus²
- E 1133 Practice for Performance Testing of Packaged Laboratory Apparatus for United States Government²
- E 1157 Specification for Sampling and Testing of Reusable Laboratory Glassware²

3. Classification

3.1 Flasks shall be of the following types and sizes.

3.1.1 *Type I*—Standard taper (§) necks, equal height:

500 mL
1 000 mL
2 000 mL
3 000 mL
5 000 mL

3.1.2 *Type II*—Three tooled necks, unequal height:

250 mL
500 mL
1 000 mL
2 000 mL
3 000 mL
5 000 mL

3.1.3 *Type III*—Three standard taper (§) necks, unequal height:

250 mL
300 mL
500 mL
1 000 mL
2 000 mL
3 000 mL
5 000 mL
12 000 mL

3.1.4 *Type IV*—Three standard taper (§) necks, equal height:

250 mL
500 mL
1 000 mL
2 000 mL
3 000 mL
5 000 mL

3.1.5 *Type V*—Three tooled necks, angled:

200 mL
500 mL
1 000 mL

3.1.6 *Type VI*—Three standard taper (§) necks, angled:

25 mL
50 mL
100 mL
200 mL
250 mL
300 mL
500 mL
1 000 mL

3.1.7 *Type VII*—Two standard taper (§) necks, unequal height:

500 mL
1 000 mL
2 000 mL
5 000 mL

3.1.8 *Type VIII*—Two standard taper (§) necks, angled:

100 mL
250 mL
500 mL
1 000 mL

NOTE 1—The term millilitre (mL) is commonly used as a special name for the cubic centimetre (cm³) and similarly the litre (L) for 1000 cubic centimetres, in accordance with the International System of Units (SI).

4. Material and Annealing

4.1 Flasks shall be made of borosilicate glass conforming to the requirements of Type I, Class A of Specification E 438.

¹ This specification is under the jurisdiction of ASTM Committee E-41 on Laboratory Apparatus and is the direct responsibility of Subcommittee E41.01 on Apparatus.

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² Annual Book of ASTM Standards, Vol 14.04.