

UNIVERSIDAD NACIONAL DE QUILMES - TECNICATURA UNIVERSITARIA EN QUÍMICA
INGLES BASICO - PARCIAL

Nombre:..... Legajo:..... Fecha:.....

Nota IMPORTANTE: todas las palabras, frases, ejemplos, etc. utilizadas para la resolución de las actividades deberán estar marcadas en el texto y con referencia a la línea en que aparecen.

Under the name of basic laboratory operations are grouped methods and general procedures that enable a successful experiment to be performed. When a reaction is carried out, the protocol begins with the choice of the adequate reagents and solvents that must be weighed or measured. It continues with the reaction, for which the solid or liquid reagents have to be transferred, mixed, stirred, heated, or cooled for certain periods of time and at certain temperatures, and then it will be necessary to isolate from the reaction crude the product(s) and proceed with their purification. This will require specific operations depending on the nature and properties of these products, such as liquid-liquid extraction depending on the different physicochemical properties of the components of a mixture, distillation properties in all its variants, filtration, recrystallization, drying, and especially the use of the different chromatographic techniques.

Finally, we should characterize the final products of the reaction by determining their physical properties, such as melting point (m.p.) or boiling point (b.p.), and their spectroscopic properties resulting from the interaction of electromagnetic radiation with matter. Together with the basic operations, a number of auxiliary tasks are necessary, such as cleaning and maintenance of laboratory equipment or as preparing solvents. All these procedures are closely linked to the use of specific materials and devices. Read the most common basic operations in the Organic Chemistry laboratory which are described in the following sections.

A fundamental aspect of the work performed in an experimental science such as Organic Chemistry is annotation of the results. It is necessary to distinguish between a professional notebook and an experiment report for an experimental course of Organic Chemistry. The two have similarities, but

21 some key differences can be highlighted. **Both documents** should be prepared in a clear and
concise way, containing all the experimental work, the incidents, and any relevant data related to
the laboratory. Research-laboratory notebooks, in private companies or academic institutions, are
24 official documents, confidential, belonging to the institution and are invaluable in the subsequent
process of publishing scientific articles and patents. Note that, in the case of an experiment report
for Organic Chemistry teaching, the students must learn the correct experimental procedures to
27 describe the reactions conducted in the experiments with respect to **their** theoretical background.
Furthermore, remember that it is essential to organize, analyze, and draw appropriate conclusions
for each experiment.

- 1) Lea el texto e identifique dos frases sustantivas centrales. Escríbala en castellano (6p)
- 2) Redacte con sus palabras lo que entiende de cada sección. (20p)
- 3) Marque a lo largo del texto un adjetivo, un comparativo y un superlativo si hubiera. (12p)
- 4) Identifique un ejemplo de cada tiempo verbal (presente/pasado/futuro) si hubiera. (10p)
- 5) Identifique en el texto una oración en voz pasiva y escríbala en castellano. Explíquela. (10p)
- 6) Indique las referencias de tres de las frases o expresiones en negrita. (12p)
- 7) Elija tres terminaciones -ing del texto y escriba como las leería en castellano o su categoría (adjetivo, sustantivo, verbo) en la frase en la que se encuentran. (12p)
- 8) Elija tres terminaciones -ed del texto y escriba en castellano como las leería en la frase en la que se encuentran. (12p)
- 9) Identifique un ejemplo de modo imperativo si lo hubiere y escríbalo en castellano coherente. (6p)

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