

A Review on Overview of Green Chemistry

Mahesh M. Thakare¹, Aakanksha G. Mukhekar², Kalyani A. Mukhekar²

Snehal A. Vhande², Komal k. Bagal², Sanket N. Dhalpe²

Assistant Professor, Department of Pharmaceutics¹

Students, Bachelor of Pharmacy²

Kasturi Shikshan Sanstha College of Pharmacy, Shikrapur, Pune, India

aakankshamukhekar@gmail.com

Abstract: *Green chemistry is an approach to the design, manufacture and use of chemical products to internationally reduce or eliminate chemical hazards. It focuses on the reduction, recycling/eliminations of the use of toxic and hazardous chemicals in production processes by finding creative, alternative routes for making the desired products that minimize the impact on the environment sustainable economic growth requires safe, sustainable resources for industrial production. This article describes an introductory account of the basic tenets on which the concept of the green chemistry is based.*

Green chemistry which is the latest and one of the most researched topic now days has been in demand since 1990's. Majority of research in green chemistry aims to reduce the energy consumption required for the production of desired products whether it may be any drug, dyes and other chemical compound. It aims to reduce or even eliminates the production of any harmful bio-product and maximizing the desired products without compromising with the environment. The goal of green chemistry (GC) is the design (or redesign) of product and manufacturing processes to reduce their impact on human health and the environment. Fundamental to the GC concept is the idea of sustainability _ reducing environment impacts and conserving natural resources for future Green generation. Although many of the principles of green chemistry are not new, the extent to which they have been organized into a coherent approach and the degree to which they are being applied have resulted in an intensified attention on this topic among the academic, industrial, and regulatory communities.

The use of toxic, poisonous, hazardous and bio-accumulative chemical substance is reduced or eliminated in green chemistry, which involves the design of chemical processes and product. It is a fresh take on scientifically based environmental protection and is essential to preventing climate change, acid rain, and global warming. Its basic tenet increases efficacy, selectivity, and minimises waste creation, making it a crucial instrument in the fight against pollution.

Keywords: *introduction, definition, history, scope, source, importance, principle, selection of appropriate solvent, industrial interests in green chemistry, industrial applications in green chemistry, green chemistry in education, advantage, disadvantage, uses, review literature, conclusion.*

Green chemistry is generally aimed at:

Producing chemicals which are safe for biotic as well as abiotic environment.

Using cost and energy effective method and procedures.

Designing processes that reduces or eliminate the use and production of toxic materials.

Minimizing the production of wastes.

Avoiding the production of non - biodegradable materials / products

Maximizing the use of raw - materials from renewable resources.