

INNOVATIVE USE OF OUTDATED DOXYCYCLINE HYDROCHLORIDE TO DYE WOOL

PRASHANT GANGAWANE¹ & USHA SAYED²

¹Research Scholar, Department of Fibers and Textile Processing Technology, Institute of Chemical Technology,
Nathalal Parekh Marg, Matunga (East), Mumbai, Maharashtra, India

²Associate Professor, Department of Fibers and Textile Processing Technology, Institute of Chemical Technology,
Nathalal Parekh Marg, Matunga (East), Mumbai, Maharashtra, India

ABSTRACT

Doxycycline is a synthetic broad-spectrum antibiotic used to treat many different bacterial infections, such as infections of urinary tract, acne, gonorrhea, chlamydiosis, periodontitis (gum disease), blemishes, bumps, and acne-like lesions caused by rosacea.

Taking outdated Doxycycline can cause serious side effects. Therefore outdated Doxycycline hydrochloride drug should be thrown out or discard if there is any leftover. Discarding unused, or expired Doxycycline in the toilet is a common practice. But this method may not be any safer than throwing in the trash, because it still is contaminating water supply.

Deposing of such drugs is a major problem in today's pharmaceutical Industries. In view of this the present study used the unused Doxycycline Hydrochloride Drug in textile processing.

Reuse of outdated Doxycycline to dye Wool by this method can keep unused Doxycycline medication from being illegally abused or sold.

This method can solve two major environmental and economical problems: limitation of environmental pollution with pharmaceutically active compounds and reduction of the disposal costs of expired drugs.

KEYWORDS: Doxycycline, Periodontitis, Bacterial Infections, Wool