SATOL Chemicals Present

No Flush Program for Rest Rooms



What is No Flush Program

There is an acute shortage of water and a large percentage of the population does not have the access to water. To add to this problem, we waste a huge amount of water in our restrooms during flushing. A conventional urinal flushes approximately 3-4 ltrs which leads to a wastage of anything between 50K ltrs to 150K ltrs in a year. This is equivalent to the drinking water requirement of 14 Families for a year.

No Flush Program is an innovative solution to control restroom odor & reduce water consumption. It is a comprehensive Waterless Urinal Program that can be adopted for any regular urinal without changing any hardware. No Flush is an end-to-end scalable and economically viable solution that helps you reduce your water footprint, attain operational efficiency and create a better customer experience.

No Flush solution comprises of products — Toilet Cleaner, Drain CARE, a specially designed Anti-Splash Urinal Screen and the Bacterial Bio Block. All these solutions are Natural and Biological in nature and does not contain any harmful chemicals which means these are completely safe for you and the environment.



Who can use this





Benefits of the Product





Saves Water

Saves over 1.5 Lakh Liters of Fresh Water. This simple step can help 14 Families in getting access to clean Drinking Water for over a year.



Certified Products

All products are certified by CII-IGBC Green Pro which means these are thoroughly tested against different ecological and safety parameters.



Safe to use

The Natural, Biodegradable and Non-Toxic ingredients in the products make them completely safe for you and the environment.



Saves Money

Saves significant money not just on the water bills but also on the sewerage and pumping costs thus having a very short ROI.



Eco Friendly

All products are made of Biological Ingredients which are Non-Toxic and 100% Bio-Degradable.



Pleasant smell

The products have their Natural Aroma and have no artificial fragrances added. The natural substances keep your restroom fresh all day.

The Science behind Urine & the Odor

SAVE WAJER

Malodor in restrooms being a big challenge, there are many facets to malodor. Human urine is a waste product produced in the kidneys that flush out the harmful byproducts produced in the body. Since it is a waste product, it can contain various salts, traces of hormones, protein, carbohydrates, fatty acids and urea. It is the urea, which degrades into ammonia which when released into the atmosphere, contributes to the malodor.

Human urine is made up of about 95% water and 5% of urea, inorganic salts like chloride, sodium & potassium combined together. Fresh urine is considered sterile and almost odourless. If we compare two samples of urine, one fresh and one a few hours old, we can sense the older sample gives a foul rotten smell. This is because the urea in the urine reacts with the water and ammonia is formed along with carbon dioxide. Hydrolysis of urea present in human urine generates odor in urinals. The enzyme, urease, hydrolyzes urea into ammonia and carbamate. The latter compound decomposes spontaneously to carbonic acid and a second molecule of ammonia.

NH2-CO-NH2 ------ NH3+H+CNO



CNO + H + H2O → NH3 + CO2

Ammonia (NH3) is a colorless gas with a pungent odor. Ammonia exists naturally in the air at levels between one part and five parts per billion (ppb) of air (OSHA, 2003). The normal human detection level of ammonia is approximately 50 ppm, some people can detect ammonia gas concentrations as low as 20 ppm (Source: UCLA and BioContractors, 2000). Even after regular cleaning with acid/phenyl based cleaners, this reaction persists and hence we get the foul odor in the urinals.

No Flush Products





SATOL S1 Wash room cleaner cum Sanitizer



Urinal Screen with Enzyme block



SATOL - OR Odour Remover AND Drian Cleaner

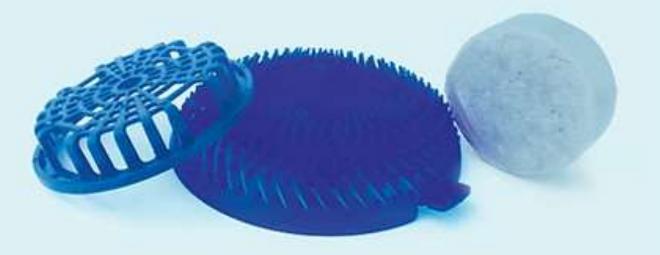
Urinal CARE Bio Block



Urinal CARE Bio Blocks are formulated with a specialized bacterial culture. These bacteria stop the natural process of ammonia formation and break down the urea into nitrogen which is an odourless gas.

Urea (+Water) ⇒ Ammonia + Carbon dioxide = FOUL ODOR Urea (+ Water) + Bio Block ⇒ Nitrogen + Carbon dioxide + Water = NO ODOR

The process of reducing ammonia into Nitrogen and remaining components into Carbon Di-Oxide happens in 2 stages



Nitrification and Denitrification Process

1. Nitrification process:

The oxidation of ammonia (NH4) is performed by Nitrosomonas bacteria; which converts ammonia to nitrites (NO2). The Nitrobacter species converts nitrites (NO2) into nitrates (NO3).

2. Denitrification process

Denitrification is conversion of nitrates back into Nitrogen gas (N2) completing the Nitrogen Cycle. This process is done by pseudomonas bacteria's in anaerobic condition. The Urinal CARE Bio-Blocks contain facultative bacterial consortium which performs in both aerobic and anaerobic conditions.

Denitrification Reaction Sequence



In a nutshell

microbes' brakes down the malodorous compounds into simpler compounds that do not have any odor.

BIO BLOCKS typically contain a number of active ingredients, including microbial spores and surfactants that are used to tackle uric acid and odor. When these blocks are placed in the urinal pans and comes in contact with the waste small quantities of spores are released.

The spores in the Bio Block become active 'good' bacteria that 'feed' upon the waste and then multiply. The culture with urine fowl is flushed through the urinal pipe. In a due course of time entire colony of microbes spurs up in the pipeline till the sewage treatment plant (STP).

The bacterial colony then deals with ammonia and other mal odor problems as explained above. In addition to the odor control the urinal pipes get auto cleaned as there is no accumulation of waste.



4 Easy steps to a sustainable solution









Disconnect the water supply to the urinal Pots

Wash the Urinal with SATOL S1 – Washroom cleaner and sanitizer and air dry Place the SATOL Urinal Screen with enzyme block inside the Urinal Pan Spray about 5 ml of SATOL – Drain Cleaner with the help of Spray bottle on the inner and outer surface of the urinal Pan and repeat spray after every 2 hours for better results

Test Certificate







This is to certify that

Superkraft Elastomers

L-32, MIDC, Ambad Nasik- 422 010 Maharashtra INDIA

has implemented and maintains a Quality Management System.

Scope: Manufacture of Plastic Components.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2015

Certificate registration no.50252175 QM15Date of original certification2016-12-07Date of certification2019-12-07Valid until2022-12-06





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Compliance Certificates

Version 1.0.0 Revision date : Print date :

07-05-2019

07-05-2019

DECLARATION CITRA WAVE IMP MF0020

CARB COMPLIANCE

We hereby declare that the above mentioned product, manufactured by Superkraft Elastomers, is

compliance with California Air Resources Board (CARB) regulation, This is as outlined in section

94509(a) and Section 94510(f) of, Title 17, California Code of Regulations.



Version 1.0.0 Revision date : 07-05-2019 Print date : 07-05-2029

EPA COMPLIANCE DECLARATION CITRA WAVE IMP MF0020



We hereby declare that the above mentioned product, manufactured by Superkraft Elastomers, is compliance with US Environmental Protection Agency (US EPA) regulation

10.0 Varision: Revision date : 07-05-2019 07-05-2019 Print date :

CALIFORNIA PROPOSITION 65 CITRA WAVE IMP MF0020



We hereby declare that the above mentioned product, manufactured by Superkraft Elastomers, does not contain CMR substance classified under California proposition 65.

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Committed to serve your units enhancing "Quality with Economy"

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