

REASONS FOR CHANGING FROM PARADICHLOROBENZENE BLOCKS

PARADICHLOROBENZENE DEODORANT

Traditionally the method of masking toilet smells has been the use of deodorant blocks. These are usually manufactured from paradichlorobenzene, a white or yellow crystalline substance.

Paradichlorobenzene (C₆H₄Cl₂) is a halogenated aromatic hydrocarbon. Commercially manufactured and not occurring in nature, it is a volatile crystalline solid with a penetrating moth ball like odour.

Paradichlorobenzene is poisonous by inhalation and a priority pollutant.

Paradichlorobenzene is absorbed into the body by inhalation or ingestion and is excreted in the urine as dichlorophenol. **Moderate exposure may cause severe headache, runny nose and swelling of the eyes¹.**

Once absorbed into the body the chemical is distributed to all organs. It causes swelling around the eyes, headache, nausea, diarrhoea, dizziness, stimulation or depression of the central nervous system, irritation of the eyes, nose and mucous membranes and petechiae².

Cases of pulmonary granulomatosis, haemolytic anaemia and allergic purpura have been reported following exposure².

There is some evidence of an association between leukaemia and exposure to dichlorobenzenes³.

With many references to the toxicity of this chemical it is of dubious benefit to use it as a toilet deodorant. As well as relief from the toxic disadvantages there are other benefits to be gained by dispensing with the use of this chemical.

1 Canadian Centre for Occupational Health and Safety.

2 Organo-Chlorine Solvents. Health Risks to Workers. Commission of the European Communities, Luxembourg. Publication No. EUR 10531 EN.

3 IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man. Some Anti-Thyroid and Related Substances, Nitrofurans and Industrial Chemicals, Vol.7, pp.231-244.

SAX Toxicity Evaluation: An experimental carcinogen and teratogen. Mutagenic data.

NTP Carcinogenic studies: Clear evidence male rat, male and female mice.

URIC ACID

Uric acid and its salts are responsible for the smelly yellow-brown build-up on urinal steps, troughs and drains.

Uric acid (NHCONHCOC:CNHCONH) is a human metabolic by product.

If left unchecked the uric acid contamination can quickly become very heavy, being absorbed into the grout between urinal step tiles and it can completely block the urinal drain.

Whilst uric acid is non hazardous it does provide a source of nutrition and habitat for various harmless forms of bacteria which we recognise as the offensive odour associated with insanitary urinals. If these bacteria are present however this could also indicate that other infectious organisms may be surviving on the urinal step.

Uric acid salts do have one advantage. They are a good indicator of the hygiene standards within the rest-room.

Control:

The good news is that uric acid contamination can be controlled.

A weekly scrub with a deck scrubber (obtained from Coles at about \$10) and toilet bowl cleaner containing sulphamic or phosphoric acid will control recent deposits on the urinal step and trough.

A narrow bladed scraper and stiff bottle brush will help with the drain which should be cleaned at least annually.

Note: To minimise the risk of blocking the urinal drain with large displaced clumps of uric acid salts it is good practice to keep up a good flow of water during the drain cleaning.

Older, deeply ingrained deposits may require the use of spirits of salts. This can be a dirty and dangerous job, it is far more preferable to stop the build up in the first place.

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