

formaldehydeNO_x

About Product

ULTRAPURE® formaldehydeNO_x is ideal for removing toxic gases and eliminating odors from the air present inside the autopsy room & mortuary.

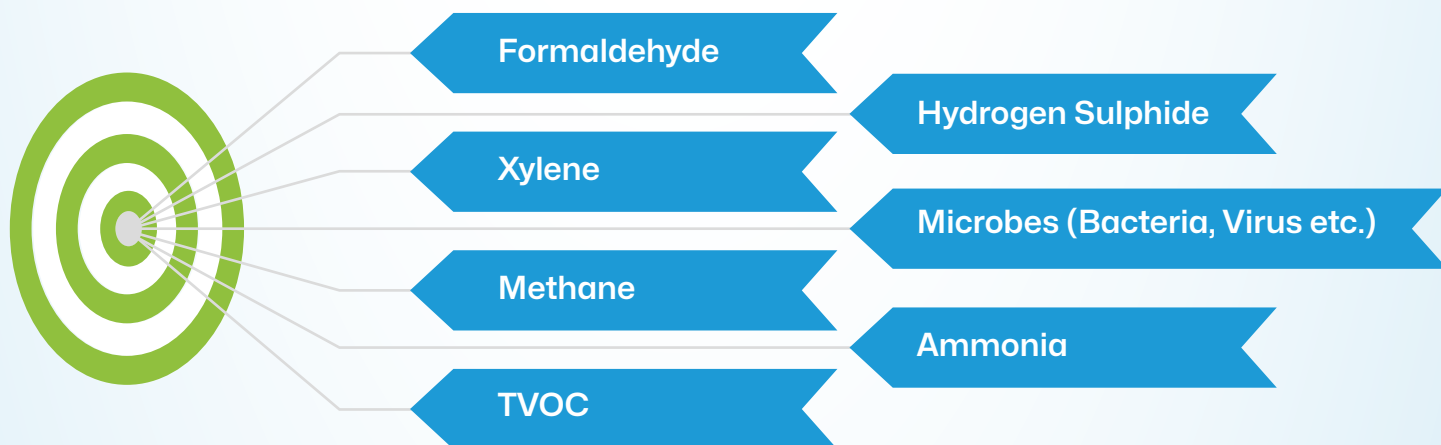
The formaldehydeNO_x comprises patented design air purification chamber powered by nanoX® & plasmOX® technology along with ultraSORB® chemisorption section.

ULTRAPURE® Envirocare possess in-house R&D and testing facilities for air purification chamber. We design & manufacture in India.



Formaldehyde is classified as a probable human carcinogen by the Environmental Protection Agency (EPA) and Health Canada. According to the Occupational Safety and Health Administration (OSHA), USA, the permissible exposure limit for formaldehyde in the workplace is 0.75 parts per million averaged over an 8-hour work day. The odor threshold for formaldehyde is between 0.1-1.0 ppm. Essentially this means that if you can smell it there is a pretty good chance that air quality does not meet safety standards.

Targeted Gases/Odors/Pollutants



Salient Features

- 1 Easy to installed.
- 2 Unit constructed using 14 G powder coated Single-skin acoustic inner sheet with minimum 25 mm thick Nitrile insulation.
- 3 10 stage patented air purification system.
- 4 Air purification chamber (900 mm height) powered by nanoX® & plasmOX® technology along with ultraSORB® chemisorption section.
- 5 Life Testable ultraSORB® chemisorption section
- 6 Energy Efficient
- 7 Self-Contained System.

Autopsy Room Role



The autopsy room plays a critical role in the educational and training process for medical students and professionals. Students learn essential skills such as dissection and examination techniques, which are fundamental in understanding disease processes and causes of death.

Mortuary Room Role



A Mortuary is a place where dead bodies are kept before cremation whereas a morgue is a place where dead bodies are kept in the refrigerated body store.

The Foul Odor factor in Autopsy room & Mortuary:

Foul odors in autopsy room & mortuary can arise from several sources, primarily due to the decomposition of organic matter and the use of chemicals.

Some major factors are:

Decomposition Gases



As a body decomposes, it produces gases like hydrogen sulfide (H_2S), methane (CH_4), and ammonia (NH_3), which contribute to the characteristic foul odor.

Chemical Preservatives



Formaldehyde, used for embalming, is volatile and has a pungent, irritating odor. It can permeate the environment, adding to the unpleasant smells. Xylene can also be present due to its use in preserving biological specimens and in the embalming process.

Lack of Ventilation



Inadequate ventilation can cause odors to become trapped and concentrated within the autopsy room & mortuary.



Air Quality & Health Problems Associated with Autopsy room & Mortuary:

The presence of embalming chemicals like formaldehyde, Xylene, hydrogen sulfide (H_2S), methane (CH_4), and ammonia (NH_3) can contribute to poor air quality if not properly managed. Formaldehyde, in particular, is a known respiratory irritant and carcinogen, and exposure to it causes the health problems for Medical Students, Professionals, staff and visitors such as:

Short-Term Health Problems:

Watery eyes, Burning sensations in the eyes, nose, and throat, Coughing, Wheezing, Nausea & Skin irritation

Long-Term Health Problems:

Respiratory problems like bronchitis, Chest pains, Fluid on the lungs at high concentrations, which can be fatal, Potential carcinogenic effects, increasing the risk of certain types of cancer.


ULTRAPURE® ENVIROCARE offer solutions for eliminating Toxic Gases & odors

with our specialized unit called

formaldehydeNO



Product Specification

Sr. No.	PARTICULARS	DESCRIPTION
1	Unit	formaldehydeNO 
2	Application	Toxic gases & odors removal from Autopsy room & Mortuaries
3	Air Flow Rate	500 to 2000 CFM
4	Air Flow Direction	Vertical Suction & Bottom Discharge
5	Construction Material	14 G powder coated Single-skin acoustic inner sheet with minimum 25 mm thick Nitrile insulation.
6	Blower	EC Fan with BMS connectivity
7	Air Purification Chamber	10 Stage (900mm height) Air filtration & purification system powered by nanoX® & plasmOX® technology along with ultraSORB® chemisorption section.
8	Voltage	220 / 440 V
9	Electrical	Single / Three Phase
10	Controls	ON/OFF Switch
11	Cell Toxicity Study	Tested on Human alveolar basal epithelial cells (A549) by IIT Guwahati
12	Certifications	CE, TUV, RoHS, ISO, GreenPro.

