

User guide for sampling and analysis of the Trichloramine on the air

$$
\frac{S M E}{E l e c i t r g n i q u e}
$$

## General information:

SYCLOPE Electronique $\mathbf{2 0 1 8}^{\circledR}{ }^{\circledR}$ User guide of the 28/02/2019 Rev 1.1
Analysis kit for Trichloramine on the air

User guide for sampling and analysis of the Trichloramine on the air (Ref : DOC0416)

Editor:
SYCLOPE Electronique S.A.S.
Z.I. Aéropole pyrénées

Rue du Bruscos
64230 SAUVAGNON - France -
Tel : (33) 0559337036
Fax : (33) 0559337037
Email : syclope@syclope.fr
Internet : http://www.syclope.fr
© 2018 by SYCLOPE Electronique S.A.S.
Subject to modification

## Summary

I. Preamble ..... 4
II. Recommendations ..... 4
III. Composition of the cases ..... 5
IV. Operating procedure to determine the Trichloramine concentration ..... 7
V. Step 1 : Cleaning the equipment ..... 8

1) Equipment to clean ..... 8
2) Cleaning the filter clamp ..... 8
3) Cleaning the syringe ..... 8
4) Cleaning the cuvette ..... 9
VI. Step 2 : Capturing trichloramine in the air. ..... 11
5) Exposure time ..... 11
6) Necessary equipment ..... 11
7) Method ..... 11
VII. Step 3 : Determine the concentration of trichloramine in the air ..... 13
8) Necessary equipment ..... 13
9) Method ..... 13
10) Interpretation of the result ..... 16
11) Error messages ..... 17
VIII. Technical support ..... 18
12) Liquid sampling technique with 10 mL syringe ..... 18
13) Battery life and change ..... 19
IX. Maintenance ..... 20

## I. Preamble

The triklorame analysis kit has been designed for use in the industrial sector such as public pools (indoor pool, cloakroom, entrance hall, technical rooms ...) and the food industry (cleaning process (NEP-CIP )).
This is a set of elements that make it possible to make a representative measurement of the concentration of trichloramine in the air in $\mathrm{mg} / \mathrm{m}^{3}$.


The method for carrying out this measurement must be scrupulously respected as indicated in the instructions. Any drift of the method will generate a drift on the final result or a false result.


The user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.


## II. Recommendations



Before each use of trikloram, it is imperative that the instrument and the test cell have been left for at least one hour in a constant temperature room before taking the measurement. Ideally, when the blank is done, all measurements made with trikloram should be made at the same temperature.

## III. Composition of the cases

Ref : VAT0002




To ensure the reliability of the measures, it is absolutely necessary to use only once the items of the VAT0002. Once an item is used, it is considered as contaminated and must not be use to perform a new analysis. It must be discarded.


Sample collection has an expiry date. A label with the batch number and expiry date is stuck on each sample bag. If used beyond this date the quality of the measurement is not guaranteed.

Ensure that wastes are recycled according to your recycling standard.

## IV. Operating procedure to determine the Trichloramine concentration

This analysis tool allows you to measure the average exposure value with a precision that varies according to the exposure time (see "exposure time" in chapter "Capturing trichloramine in the air")


The determination of the trichloramine concentration uses well defined analysis and sampling techniques. It is therefore mandatory to follow the instructions exactly.
On the other hand, it is imperative to respect the operating modes indicated in the chapter "Technical Support" in order to guarantee the accuracy of the results.


Wearing gloves is mandatory for handling the chemicals used. As such, the gloves must be used throughout the procedure for determining the concentration of Trichloramine.

