

THM Removal With Liqui-Cel® Membrane Contactors

Many water processing systems are designed to reduce the total oxidizable carbon compounds (TOCs) present in the water. Trihalogenated methane compounds (THMs) are common contaminants in water and are often a major component of TOC measurements. THMs often result from the use of chloramines by municipal water treating plants. The presence of these compounds can adversely affect downstream processes that require high purity water. For example semiconductor manufacturing sites can experience reductions in product yields in the presence of THMs. Therefore removal of THMs can increase product yields and thereby increase profits.

Membrana recently conducted THM removal pilot trials at a semiconductor site. These trials confirmed that Liqui-Cel® Membrane Contactors are very effective in removing THM compounds. Based on this data and other operating experience, commercial systems can be designed to remove up to and exceeding 95% of THM compounds (specific results will depend on THM composition and actual operating conditions). Membrana now has several systems in operation that were installed specifically to remove THMs. These systems have been operating successfully for over a year. In addition to THM removal, other volatile compounds can be easily removed using Liqui-Cel® Membrane Contactors.

Treating systems utilizing Liqui-Cel® Membrane Contactors offer several distinct advantages over existing technologies. Some of these advantages are:

- Modularity – Membrane systems are inherently modular. This provides operational flexibility in that the system can be easily and economically adjusted to accommodate process changes.
- Small footprint - Liqui-Cel® Membrane Contactors can be packaged into compact configurations. In addition systems can be custom designed to fit into existing space constraints. Point-of-use systems can also be designed.
- Ease of operation – With almost no instrumentation, Liqui-Cel® Membrane Contactors are very simple to operate. This minimizes manpower requirements.
- Simple and inexpensive testing – Small Liqui-Cel Membrane Contactors can be used to pilot the removal of THMs and determine the final number of contactors needed.

For more information on reduction of TOC levels in water please contact your Membrana representative.

This product is to be used only by persons familiar with its use. It must be maintained within the stated limitations. All sales are subject to Seller's terms and conditions. Purchaser assumes all responsibility for the suitability and fitness for use as well as for the protection of the environment and for health and safety involving this product. Seller reserves the right to modify this document without prior notice. Check with your representative to verify the latest update. To the best of our knowledge the information contained herein is accurate. However, neither Seller nor any of its affiliates assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material and whether there is any infringement of patents, trademarks, or copyrights is the sole responsibility of the user. Users of any substance should satisfy themselves by independent investigation that the material can be used safely. We may have described certain hazards, but we cannot guarantee that these are the only hazards that exist.

Liqui-Cel, Celgard, SuperPhobic and MiniModule are registered trademarks and NB is a trademark of Membrana-Charlotte, A division of Celgard, LLC and nothing herein shall be construed as a recommendation or license to use any information that conflicts with any patent, trademark or copyright of Seller or others.

©2007 Membrana – Charlotte A Division of Celgard, LLC (TB12Rev3_10-05)



Membrana - Charlotte
A Division of Celgard, LLC
13800 South Lakes Drive
Charlotte, North Carolina 28273
USA
Phone: (704) 587 8888
Fax: (704) 587 8585

Membrana GmbH
Oehder Strasse 28
42289 Wuppertal
Germany
Phone: +49 6126 2260 - 41
Fax: +49 202 6099 -750

Japan Office
Shinjuku Mitsui Building, 27F
1-1, Nishishinjuku 2-chome
Shinjuku-ku, Tokyo 163-0427
Japan
Phone: 81 3 5324 3361
Fax: 81 3 5324 3369

MEMBRANA
Underlining Performance
www.membrana.com
www.liqui-cel.com

A **POLYPORE** Company