



# Carbon Tetrachloride: Critical Building Block

## Global Sustainability Efforts

CTC is the feedstock for all the low GWP HFO alternatives that will enable compliance with the Kigali Amendment and the AIM Act and allow US companies to maintain competitiveness in global markets.

CTC is a key raw material used in next-generation refrigerants for air conditioning systems in over **95%** of automobiles sold in the US.

Additionally, CTC is a feedstock in foam blowing agents for insulation products to enhance energy efficiency.

“Our member companies are dedicated to the responsible manufacture and use of CTC, and support strong, science-based regulation of this important chemistry.”

## EPA’s Approach to Risk Management of Carbon Tetrachloride

The Environmental Protection Agency (EPA) has determined that exposure to Carbon Tetrachloride (CTC) presents an unreasonable risk to workers. Under the requirements of the Toxic Substances Control Act, EPA is soon expected to propose regulations aimed at reducing occupational exposure to this important substance. As part of this effort, the Agency has announced its intent to implement an exposure limit for this existing chemical (or ECEL) that is more than 300 times lower than the limit established by the Occupational Safety and Health Administration (OSHA). The ECEL developed by EPA will present a significant compliance challenge for the manufacture of CTC for use in the production of refrigerants and foam blowing agents.

## Economic Importance

Eliminating use of CTC as a feedstock would threaten major facilities in Kansas, Louisiana, and Texas along with a projected **33,000** American manufacturing jobs.



According to the Interindustry Forecasting at the University of Maryland, it could also impact an estimated **\$12.5 billion** increase in direct manufacturing output per year by **2027** and a **25% boost** in US exports of refrigerants and related equipment.

## Solutions

To ensure the continued availability of CTC to produce refrigerants, EPA’s risk management rule for these substances must -

- Recognize the use of PPE during short-term maintenance tasks to demonstrate compliance with the ECEL, or
- Grant an exemption from the risk management rules for manufacture and feedstock use provided appropriate industrial hygiene practices are in place.

## TSCA Risk Evaluation Concerns

**Without an opportunity for public comment**, EPA identified an ECEL of 0.03 parts per million (ppm) for CTC.

- The CTC ECEL is **333 times lower** than the OSHA limit and below all other Occupational Exposure Limits globally.
- Existing industrial hygiene methodologies have not yet been developed to evaluate CTC levels this low.

The TSCA risk evaluation for CTC is flawed.

- EPA relied on unrealistic exposure assumptions, such as full-hand, 8-hour dermal contact and no use of respiratory protection.
- In some cases, values **less than the level of detection** were used to determine unreasonable risk.
- Scientific concerns documented in the comments and in a Request for Correction have yet to be resolved.

