

# Is Grignard Pure™ Safe? The FACTS About TEG

Grignard Pure™ is a rigorously tested, EPA-approved continuous, antimicrobial air treatment solution that kills more than 98% of SARS-CoV-2 virus particles in the air, when people are present, and where the CDC has told us that transmission is most likely. It is the *only EPA-regulated solution* that provides a critical added layer of protection, killing virus particles as they enter the air from talking, coughing, sneezing and reducing what is the primary cause of infection.

The active ingredient in Grignard Pure is triethylene glycol (TEG). While TEG is not a new chemical, interest in its safety has piqued with the attention around Grignard Pure's Section 18 Public Health Emergency Exemption approval. Here are the facts you need to know about Grignard Pure and TEG.



## TEG IS IN USE ALL AROUND US.

TEG has been in use all around us for decades and has uses other than as an antimicrobial air treatment. It is a key ingredient for use in lighting effects and atmospheric haze products commonly seen in film and TV production, live stage shows, and more. It is also present in air sanitizers regulated by the U.S. Environmental Protection Agency (EPA) and “indirect” food additives regulated by the U.S. Food & Drug Administration (FDA).

## GOVERNMENT AGENCIES: TEG IS “LOW RISK”.

Government agencies have judged TEG to be “low risk” when used in products regulated by those agencies.

- **EPA:** Based on a review of the available toxicology data, the EPA has concluded that TEG is of very low toxicity with no endpoints of concern for oral, dermal, or inhalation exposure. Further, when evaluating approval for Grignard Pure for a Section 18 Public Health Emergency Exemption, the EPA reviewed all available data on this product's safety and concluded that it does not pose any health risks of concern.
- **NIH:** The PubChem database maintained by the National Institutes of Health (NIH) is a public, online compilation of summaries and references of scientific studies and assessments of chemicals by government agencies and independent scientists. The PubChem files for TEG are available [here](#) (lists over 75 citations to studies for the toxicity and metabolism of TEG).
- **NIOSH:** According to a NIOSH Health Hazard Evaluation Report conducted in a theatrical setting, there was no evidence that theatrical smoke containing TEG at the levels found in the theatres studied, is a cause of occupational asthma for performers.

## TEG IS LISTED ON EPA'S SAFER CHEMICALS INGREDIENTS LIST (SCIL)

TEG is recognized as a Green Circle material, which means that it “has been verified to be of low concern based on experimental and modeled data.” More information on this program can be found [here](#).

## GRIGNARD PURE WILL NEVER REACH TEG LEVELS OF CONCERN.

Exposure to TEG from the proper use of Grignard Pure will be well-below the recommended safe exposure limits, and *hundreds of times* lower than the concentration that caused no systemic effects in inhalation toxicity. For example, the concentration of Grignard Pure that needs to be in the air to be deemed effective is between 0.5mg/m<sup>3</sup> and 3mg/m<sup>3</sup>. This equates to a non-visible or very light haze. For comparison, the amount that would need to be in the air to even begin to approach levels that would warrant potential concern is 1000mg/m<sup>3</sup>.

## GRIGNARD PURE UNDERWENT RIGOROUS INDEPENDENT TESTING.

In 2020, Intrinsic, a globally-recognized scientific and regulatory consulting firm providing expert regulatory and toxicology advice, conducted a Toxicology Risk Assessment on Grignard Pure. It confirmed the product is safe for use, when used as directed and a population is exposed for extended periods of time.



For more information call us at (732) 649-7100 Ext. 355