

# Zero Gravity Third Rail®: Environmental Sheet

Anti-Icing  
Agent

## PRODUCT DESCRIPTION



Zero Gravity Third Rail Anti-Icer keeps transit trains running on schedule and maintains maximum safety for passengers. Zero Gravity Third Rail Anti-Icer was developed to permit uninterrupted third-rail operation at freezing temperatures. With the absence of electrolytes, there is no possibility of galvanic action and corrosion. Being non-conductive, electrical shorts and arcing are also eliminated.

## ENVIRONMENTAL FACTS



Zero Gravity Third Rail Anti-Icer is enhanced by NASA's smart fluid technology, (U.S. patent 5,772,912) which was developed by NASA, Ames Research Center, for which Midwest Industrial Supply, Inc. and NASA have a joint license agreement. This technology enhances Zero Gravity Third Rail Anti-Icer to resist removal by rain, sleet, snow and wind and is easily applied at low temperatures.

Zero Gravity Third Rail Anti-Icer is formulated using a blend of diethylene glycol (DEG) and propylene glycol (PG) optimizing the benefits of each material. It is considered to be practically non-toxic to aquatic life.

Zero Gravity Third Rail Anti-Icer is a blend of the two glycols, reducing the chronic oral toxicity. When used in an industrial application and as directed per manufacturers' instructions there is no chance for ingestion. It is not absorbed easily through the skin and therefore poses little risk of injury upon contact. Vapor inhalation of Zero Gravity Third Rail Anti-Icer poses little health risk, especially when used in cold temperatures, since there is little volatilization.

Zero Gravity Third Rail Anti-Icer is readily biodegradable and will not remain in the environment for an extended period of time. It degrades completely to carbon dioxide, carbon monoxide and water.

*Zero Gravity  
NASA Technology  
Patent No.  
5,772,912*