Consumers

Consumer Health and Safety
Antifreeze should be handled with care. Hot antifreeze can cause severe burns to users, and some antifreeze formulations are toxic if swallowed by humans or animals. Manufacturers should educate consumers about these risks and, where appropriate, design products that pose the least possible risk to people and animals.

Managing the Supply Chain

Workers
Workers may be exposed to dust, noise, harmful chemicals, or other industrial hazards. To help ensure worker health and safety and labor rights, manufacturers should have a documented health and safety management plan, including a chemical management plan where needed, and provide safety training and personal protective equipment to workers. Manufacturers should procure materials from suppliers that address worker health and safety and labor rights transparently and should perform audits when needed.

Use of Resources

Climate and Energy
Burning fuel to produce the chemical ingredients of antifreeze can generate pollutants that contribute to climate change, smog, acid rain, and other impacts. Manufacturers should procure new ingredients from petrochemical plants that implement best practices and technology to improve energy efficiency and capture emissions. Manufacturers should also use recycled ingredients.

Disposal and End-of-Life
Antifreeze contains chemicals that, if leaked, spilled, or disposed of
improperly, can pose a health threat to humans and other life. Manufacturers should maximize
the safety of their antifreeze, participate in programs
that collect and handle antifreeze responsibly after final use, and educate consumers about
proper disposal.

Packaging
Packaging design should be optimized to ensure that packaging performs its essential functions
of containment and protection while minimizing use of materials, energy resources, and
environmental impacts across the life cycle of the packaged product. Under-packaging and
over-packaging can both lead to increased impacts. These impacts may be mitigated by using
more energy-efficient manufacturing, creating packaging materials from renewable resources,
designing packaging to be recyclable, and encouraging consumer recycling.

Pollution
Harmful gases may be emitted during the production of some chemicals used in antifreeze.
Manufacturers should work with their supply chains to implement best available practices and
technology to minimize or eliminate these emissions.