

PRODUCT STEWARDSHIP SUMMARY

GREASE ADDITIVES

Introduction

Afton has a range of multipurpose industrial grease additive packages that provide differentiation and defined performance. Our Grease Additives are designed to provide excellent corrosion protection and antioxidancy performance, along with EP and anti-wear protection. They are formulated to resist degradation of critical grease properties such as dropping points and stability in the presence of water.

Uses and Advantages

Grease Additives are used to lubricate components where conventional lubricants are unsuitable or impractical, such as plain bearings, roller bearings, gears and couplings. Advantages to using these additives are:

- Excellent Extreme Pressure and load carrying properties
- Long term rust and wear protection
- Maintains thickener integrity
- High thermal and oxidative stability

Health Effects

Grease Additives can cause adverse health effects through skin contact or through inhalation of sprays, mist, fumes, or aerosols. Health effects vary depending on the specific components in the package, but may include irritation or corrosion of eyes, skin, and respiratory tract. There is also a chance of skin sensitization associated with some of these packages.

Environmental Effects

Because of the alkyl phenol and Zinc Dialkyl Dithiophosphates (ZDDP) present in some of these additives, some are considered toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. Some may contain components that may be persistent in the environment.

Exposure

Typically, worker exposure is managed with the following:

Industrial Use Exposure:

- Exhaust ventilation or other engineering controls to keep airborne concentrations of fumes, mists and vapors below their respective threshold
- Safety glasses with side shields, chemical resistant gloves, appropriate respiratory protection
- Good industrial hygiene practices and management

Commercial Use Exposure:

Grease Additives are mainly targeted for the commercial sector. These are generally used as finished greases. The total concentration of the hazardous materials in the additive package is significantly reduced in the finished grease. The risks associated with the hazards from the additive package components are mitigated as direct exposure is low.

Risk Management

Grease Additives may contain hazardous components at different concentrations across the portfolio. The primary hazards are associated with the ZDDP, alkyl phenol, and aryl amine found in some of the products. Depending on the product, there may be physical, health, or environmental hazards, and the risks are managed through the supply chain to ensure adequate protection for our employees, customers, consumers, and the environment. Information on the safe handling of these products is provided via the Safety Data Sheet (SDS). Appropriate engineering controls, work practices and PPE are required to control exposure during manufacturing and use.

Conclusion

Grease manufacturing and application combine chemistry, physics, rheology and tribology into a product that is a lubricant, a pump, and a seal from contaminants, all in one. Afton's environmentally responsible chemistry means that modern greases can confidently handle the latest requirements for EP, wear protection, corrosion inhibition and extended grease life, without losing thickener compatibility or cost effectiveness. Afton is committed to providing its customers with the information they need to responsibly manage any health and environmental risks associated with the intended use of Afton products.

For additional information, contact us at:

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