AVM Industries Gas Spring/Damper SDS

Manufacturer: AVM Industries Address: P.O. Box 729 Hwy 76 East Marion, SC 29571 Emergency Telephone: (843) 464-7823 Date: 20 July 2015 Revision No.: 1 Document No. 1

SECTION I: Product Identification

Product: Gas Springs and Dampers

Part Numbers:

All part numbers and designs

SECTION II: Hazardous Ingredients

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200

SECTION III: Composition/Information on Ingredients

This product contains nitrogen and/or a glycol based oil Oil Component: Polypropylene glycol monobutyl ether CASRN: 9003-13-8 Concentration: >99.9%

SECTION IV: First Aid Measures

Description of first aid measures (exposure to oil in damper or gas spring) General advice: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air; if effects occur, consult a physician. **Skin contact:** Wash off with plenty of water.

Eye contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Ingestion: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

Most important symptoms and effects, both acute and delayed: Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

SECTION V: Fire-fighting Measures

Extinguishing Media: Foam, CO2 or dry media listed for Type B fires

Unsuitable Extinguishing Media: Do not use direct waste stream, may spread fire. **Hazardous Combustion Products**: Carbon Monoxide

Unusual Fire and Explosion Hazards: Body may rupture from gas generation during fire. Violent steam generation or eruption may occur upon direct water stream to hot liquids. **Conditions under which ignition will occur**: None Known

SECTION VI: Accidental Release Measures

Steps to be taken if material is spilled or released: Contain oil if product is ruptured. Collect in suitable and properly labeled container. Use appropriate safety equipment (see section 8 for personal protection). Material will float on water. Prevent from entering soil, ditches, sewers, waterways and/or groundwater. Contents not RCRA regulated

SECTION VII: Handling and Storage

Precautions for safe handling: Do not swallow. Wash thoroughly after handling.
Spills of oil on hot fibrous insulations may lead to lowering of the auto ignition temperatures possibly resulting in spontaneous combustion.
Conditions for safe storage: Store gas springs/dampers shaft down to extend shelf life (keep seals lubricated). Store in cool, dry, ventilated area.
Shelf life: Use within 24 Months

SECTION VIII: Exposure Controls / Personal Protection

Respiratory: Ambient Air Eye Protection: Glasses with side shields Ventilation: Local Gloves: Not required. Other Equipment: None

SECTION IX-A: Physical and Chemical Data of Gas (Nitrogen)

Boiling Point: -320° FSpecific Gravity: 0.97 @ 70°FVapor Pressure: Not ApplicablePercent Volatile by Volume: Not ApplicableVapor Density: 0.072 lb.ft³Evaporation Rate: Not ApplicableSolubility in Water: 0.023 @ 32° FFlashpoint: Not ApplicableAppearance and Odor: Colorless, odorlessgas contained in a non-refillable container

SECTION IX-B: Physical and Chemical Data of Oil

Boiling Point: $>392^{\circ}$ F Vapor Pressure: <0.01 mmHgVapor Density: $>1.0 \text{ lb.ft}^3$ Solubility in Water: $0.016 @ 68^{\circ}$ F Pour point: -70.1° F Specific Gravity: 0.98 @ 70°F Percent Volatile by Volume: Not Applicable Evaporation Rate: None Flashpoint: >246° F Appearance and Odor: Low Color, low odor liquid contained in a non-refillable container

SECTION X: Stability and Reactivity Data

Stability: Stable under normal temperatures and pressures
Reactivity: No data available
Incompatibility: None, Do not ship with explosives as per 49 CFR 172
Hazardous decomposition products: None
Hazardous polymerization: Will not occur

SECTION XI: Toxicology Information

Hazard Category: Sudden Release of Pressure Hazard **NFPA labeling**: H 1 F 1 R 0 Special Compressed Gas

Acute toxicity (Oil)

Acute oral toxicity

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. LD50, Rat, > 2,291 mg/kg

Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

LD50, Rabbit, > 8,000 mg/kg

Acute inhalation toxicity

At room temperature, exposure to vapor is minimal due to low volatility. For respiratory irritation and narcotic effects: No relevant data found.

As product: The LC50 has not been determined.

Skin corrosion/irritation

Brief contact may cause slight skin irritation with local redness.

Serious eye damage/eye irritation

May cause slight temporary eye irritation.

Sensitization

For skin sensitization: No relevant data found.

For respiratory sensitization: No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Available data are inadequate to determine single exposure specific target organ toxicity.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Based on available data, repeated exposures to small amounts are not anticipated to cause significant adverse effects.

Carcinogenicity: No relevant data found.

Teratogenicity: No relevant data found.

Reproductive toxicity: No relevant data found.

Mutagenicity: No relevant data found.

Aspiration Hazard: Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

COMPONENTS INFLUENCING TOXICOLOGY: <u>Polypropylene glycol monobutyl ether</u>

Acute inhalation toxicity: At room temperature, exposure to vapor is minimal due to low volatility. For respiratory irritation and narcotic effects: No relevant data found.

SECTION XII: Ecological Information

Ecotoxicity of oil

Acute toxicity to fish Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50>100 mg/L in the most sensitive species tested). LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, 190 mg/l, OECD Test Guideline 203 or Equivalent Acute toxicity to aquatic invertebrates EC50, Daphnia magna (Water flea), static test, 48 Hour, 450 mg/l, OECD Test Guideline 202 or Equivalent **Toxicity to bacteria** EC50, Bacteria, static test, 16 Hour, 2,800 mg/l **Persistence and degradability Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. 10-day Window: Pass **Biodegradation:** 84 % Exposure time: 28 d Method: OECD Test Guideline 301B or Equivalent **Bioaccumulative potential Bioaccumulation:** No relevant data found. Mobility in soil: No relevant data found.

SECTION XIII: Precautions and Disposal

Other Precautions: None

Disposal: Do not incinerate or depressurize and dump oil into sewer, ground or body of water. This material is considered to be recyclable. Dispose according to local, state, and federal regulations.

SECTION XIV: Transportation Information

DOT: Not regulated for transport **Classification for SEA transport (IMO-IMDG):** Not regulated for transport **Classification for AIR transport (IATA/ICAO):** Not regulated for transport

SECTION XV: Regulatory Information

OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Pennsylvania Worker and Community Right-To-Know Act:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

United States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SECTION XVI: Other Information

Hazard Rating System NFPA Health = 1 Fire = 1 Reactivity = 0

Revision

Issue Date: 07/20/2015 / Version: 1.0

Information Source and References

This SDS is prepared by Product Engineering and EHS Groups from information supplied by internal references within our company