



Product Name: TM-10 Traction Motor Gear Case Additive

Revision No.: 2

Issue Date: 9-10-2009

Material Safety Data Sheet

Section 1: PRODUCT AND COMPANY INFORMATION

Product Name: TM-10 Traction Motor Gear Case Additive

Intended Use(s): Antifriction gear lubricant additive

Company: Muscle Products Corp.

752 Kilgore Road

Jackson Center, PA 16133 U.S.A.

Company Telephone Number: 1-800-227-7049 U.S. & Canada

1-814-786-0166 International

Company Web Site: www.mpclubricants.com

24-Hour Emergency Telephone: 1-800-535-5053 Infotrac – U.S. & Canada

1-352-323-3500 Infotrac – International

Section 2: HAZARDS IDENTIFICATION

Emergency Overview

Appearance and Odor: Red, low viscosity liquid; mild petroleum odor.

Health Hazards: CAUTION! May cause eye and skin irritation. May be harmful if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage.

Safety Hazards: WARNING! Slipping hazard if spilled.

Potential Health Hazards: See Section 11 for more information.

Likely Routes of Exposure: Skin, eyes, inhalation.

Inhalation: This product is not expected to pose an inhalation risk where exposure limits are observed. Heating may generate vapors that can be irritating to respiratory passages. Prolonged exposure may result in dizziness, headaches and nausea.

Ingestion: Swallowing can cause nausea, diarrhea and vomiting. Vomiting may result in aspiration into the lungs with a risk of chemical pneumonitis.

Skin Contact: May cause skin irritation. Prolonged and repeated contact can de-fat skin, which may result in dryness, redness, itching and cracking (dermatitis).

Eye Contact: May cause eye irritation, resulting in redness or burning.

Medical Conditions

Aggravated by Exposure: None known.

Target Organs: None known.

Other Hazards: Spillages may be slippery. Do not walk through spilled material.

Potential Environmental Effects: See Section 12 for more information.

Analysis for ecological effects has not been conducted on this product. However, if spilled, plants and animals may experience harmful effects when coated with petroleum-based products.

Other Information:

This product does not contain any carcinogens as listed by OSHA, IARC or NTP.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

OSHA Hazardous Components

Component	CAS No.	% by Wt.	Carcinogen
Petroleum hydrocarbons	Proprietary *	70 - 84%	No
Highly-refined mineral oil	64742-52-5	15 - 29%	No
Antiwear oil additive	N/A - mixture	< 3%	No

* The specific chemical identity is being withheld as a trade secret. This component contains no carcinogens, mutagens or toxic substances.

Additional Information: None.

Section 4: FIRST AID MEASURES

Eye Contact:	Immediately flush with water for at least 15 minutes while holding eyelids open. Remove contact lenses if worn. Get medical attention if irritation persists.
Skin Contact:	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation develops and persists. Wash clothing and shoes before reuse.
Inhalation:	Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion:	Do NOT induce vomiting. If vomiting occurs, have person lean forward with head below hips to prevent aspiration into the lungs. Call a physician or poison control center. Never give anything by mouth to an unconscious person.

Note to Physicians: Unlikely to be required, but if necessary, treat symptomatically.

Additional Advice: None.

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Use water spray, water fog, dry chemical, foam, carbon dioxide, earth or sand.
Unsuitable Extinguishing Media:	Do not use a forced stream of water as this may cause fire to spread.
Products of Combustion:	Carbon dioxide, carbon monoxide, aldehydes and ketones, hydrogen chloride, smoke, and irritating vapors.
Firefighter Protection:	Water and foam may cause frothing. Wear full protective clothing and self-contained breathing apparatus. Use waterspray to disperse vapors and keep adjacent containers cool.
Additional Advice:	None.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Eliminate all ignition sources. Evacuate personnel to a safe area. Use appropriate personal protective equipment (see Section 8). Warning! spillages may be slippery. Do not walk through spilled material.
Environmental Precautions:	Contain spill to prevent environmental contamination. Keep from entering drains, sewers, waterways and soil.
Methods for Containment:	Stop the spill or leak if possible without personal risk. Absorb with sand, earth or other inert material.
Methods for Clean-Up:	Vacuum, scoop or sweep up material. Place waste in a container, seal and dispose of safely.
Other Information:	Observe all relevant federal, state and local regulations.

Section 7: HANDLING AND STORAGE

Handling: Keep away from heat, sparks and flame. Avoid contact with eyes. Avoid prolonged skin contact. Do not breath hot vapors or mist. Use adequate ventilation if concentrations exceed permissible exposure limits. Wash hands thoroughly after handling and before eating and drinking. Avoid elevated temperatures to prevent product degradation. Keep containers closed when not in use.

Storage: Do not store at temperatures exceeding 104 deg. F (40 deg. C) or in direct sunlight. Keep containers closed and dry. Store away from heat, sparks, open flame and oxidizing materials.

Additional Advice: Expected storage life under recommended conditions is two (2) years.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Material	OSHA-PEL	ACGIH-TLV
Petroleum hydrocarbons	Not established	Not established
Mineral oil, as Oil Mist	TWA: 5 mg/m3	TWA: 5 mg/m3
Mineral oil, as Oil Mist	-----	STEL: 10 mg/m3

Engineering Controls: Ventilation controls are not normally required under intended conditions of use. Provide exhaust ventilation or other engineering controls if airborne mist or vapor concentrations exceed permissible exposure limits.

Eye / Face Protection: Safety glasses are recommended. Wear chemical splash goggles and face shield when eye and face contact is possible due to splashing or spraying of material.

Skin Protection: Use neoprene or nitrile gloves to avoid prolonged or excessive skin contact. Other skin or body protection is normally not required except in emergency or spill conditions. Protective clothing, shoes or boots should be chemical resistant (i.e. neoprene). If handling hot material, use insulated protective clothing.

Respiratory Protection: Normally not required except in emergencies or circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a NIOSH-approved positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known, or any other circumstance where air-purifying respirators may not provide adequate protection.

General Hygiene: Wash thoroughly after handling and before eating and drinking.

Other Information: Personal protective equipment (PPE) should meet recommended national standards.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Red, low-viscosity liquid.

Odor: Mild petroleum.

Odor Threshold: Not established.

Viscosity: 214.6 cSt @ 40 deg. C / 15.07 cSt @ 100 deg. C

pH: Not established.

Freezing Point: Not established.

Melting Point: Not applicable.

Boiling Point: 364 deg. F (184.4 deg. C)

Flash Point: 313 deg. F (156 deg. C) ASTM D93

Flammable Limits: **Upper:** Not established.
Lower: Not established.

Autoignition Temperature: ~ 600 deg. F (315.6 deg. C)
Evaporation Rate: Not established.
Vapor Pressure: < 0.125 PSI
Vapor Density: Not established.
Specific Gravity: 1.0744 g/cm³ @ 60 deg. F
Solubility in Water: Insoluble.
VOC Content: 0 % based on component data.
Other Information: None.

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal conditions.
Conditions to Avoid: Keep away from direct sunlight, heat, hot surfaces, sparks and flame. Prolonged heating at temperatures above 158 deg. F (70 deg. C) or heating above 392 deg. F (200 deg. C) for short periods of time may result in product decomposition. Petroleum products tend to soften or swell most natural rubbers.
Incompatible Materials: Strong oxidizers.
Hazardous Decomposition Byproducts: Carbon dioxide, carbon monoxide, smoke, irritating vapors, and unburned hydrocarbons if combustion is incomplete. Hydrogen chloride if thermal decomposition occurs.
Possibility of Hazardous Reactions: Not expected to occur.

Section 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

Oral: No toxicity data on product. Main component: LD50 > 21,500 uL/kg (rat), low toxicity. Base oil reports LD50 > 5,000 mg/kg (rat), low toxicity.
Dermal: No toxicity data on product. Main component reports mild irritation in rats at 100 mg for 24 hours. Base oil: LD50 > 2,000 mg/kg (rabbit), low order. Prolonged and repeated skin contact can de-fat skin which may result in dryness and cracking (dermatitis).
Inhalation: No toxicity data on product. Not expected to pose an inhalation risk where exposure limits are observed.
Eyes: No toxicity data on product. Main component reports mild irritation in rabbits at a dose of 100 mg.
Sensitization: Not expected to occur.
Other Information: This information is provided based on available data from components or similar materials.

CHRONIC EFFECTS

Carcinogenicity: This product is not known to contain carcinogenic substances.
Mutagenicity: This product is not known to contain mutagenic substances.
Reproductive Effects: This product is not expected to pose a reproductive risk.
Developmental Effects: This product is not expected to pose an embryotoxic/teratogenic risk.
Other Information: This product has been used for years with no known ill effects. Repeated overexposure may produce liver and kidney damage.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Ecotoxicity data is not available for this product. Main component reports it is non-toxic to mussels at 2.18 mg/L and rainbow trout at 4.0 mg/L after 60 days.
Persistence / Degradability: Not determined for this product. Main component reports there is evidence of partial hydrolysis in water and slow degradation in soil and water.
Bioaccumulation: Not determined for this product. Main component reports it has low potential for bioaccumulation.
Mobility: Not determined.
Additional Information: Analysis for ecological effects has not been conducted on this product. However, if spilled, plants and animals may experience harmful effects when coated with petroleum-based products.

Section 13: DISPOSAL CONSIDERATIONS

- Disposal:** It is the responsibility of the user to evaluate at the time of disposal whether the waste meets RCRA criteria for hazardous waste. Product use, transformations, mixtures, contamination and spillage may change its characteristics. Dispose of in accordance with federal, state and local regulations.
- Empty Containers:** Product residue remains in empty containers. Do NOT puncture, cut, drill, grind, or weld on or near empty containers. Empty drums should be completely drained, properly bunged or sealed, and promptly returned to a drum reconditioner, properly disposed of or cleaned.
- Additional Considerations:** Do not discharge into drains or the environment. Observe all federal, state and local regulations.

Section 14: TRANSPORT INFORMATION

U.S. DOT (GROUND)

- | | | | |
|-------------------------------|----------------|--------------------------|-----------------|
| Hazardous Material: | No. | Class / Division: | Not applicable. |
| Identification Number: | Not regulated. | Packing Group: | Not applicable. |
| Proper Shipping Name: | Lubricant oil. | | |

CANADIAN TDG (GROUND)

- | | | | |
|-------------------------------|---------------|--------------------------|--|
| Hazardous Material: | No. | Class / Division: | |
| Identification Number: | See U.S. DOT. | Packing Group: | |
| Proper Shipping Name: | | | |

IATA (AIR)

- | | | | |
|-------------------------------|---------------|--------------------------|--|
| Dangerous Good: | No. | Class / Division: | |
| Identification Number: | See U.S. DOT. | Packing Group: | |
| Proper Shipping Name: | | | |

IMDG (WATER)

- | | | | |
|-------------------------------|---------------|--------------------------|-----|
| Dangerous Good: | No. | Class / Division: | |
| Identification Number: | See U.S. DOT. | Packing Group: | |
| Proper Shipping Name: | | Marine Pollutant: | No. |

Section 15: REGULATORY INFORMATION

- TSCA Inventory Listing:** The components of this product are on the U.S. TSCA Inventory or are exempt.
- CERCLA Hazardous Substances (40 CFR 302):** This product contains no CERCLA hazardous substances.
- SARA 302 Extremely Hazardous Substances (40 CFR 355):** This product contains no SARA extremely hazardous substances.
- SARA 311/312 Hazardous Chemical Inventory Reporting (40 CFR 370):** This product is subject to inventory reporting if present above the minimum threshold level of 10,000 lbs. (4,540 kg).

SARA Hazard Classifications:

- | | |
|---|-----|
| Immediate (acute) health hazard: | Yes |
| Delayed (chronic) health hazard: | No |
| Fire hazard: | No |
| Sudden pressure release hazard: | No |
| Reactivity hazard: | No |

- SARA 313 Toxic Chemical Release Reporting (40 CFR 372):** This product contains no SARA toxic substances.

Additional Information: One or more of the components are on the following global inventories:

Asia-Pacific: ASIA-PAC

Australia: AICS

Canada: DSL

Europe: EINECS, SWISS Giftliste

Japan: ENCS

Korea: ECL
New Zealand: NZIoC
Philippines: PICCS

Section 16: OTHER INFORMATION

HMIS RATING CLASSIFICATION

Health:	1	Physical Hazard:	0
Flammability:	1	Personal Protection:	B

NFPA HAZARD IDENTIFICATION

Health hazard (blue):	1	Instability hazard (yellow):	0
Flammability hazard (red):	1	Special hazard (white):	

MSDS Effective Date: 9-10-2009
Revision Number: 2
Revision Indicator: This MSDS has been revised as follows:
The content and format have been revised for compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1.

Prepared by / position: Amy Dent, Director of Quality & Environmental Management

The information contained in this document applies to this specific material as supplied, and is accurate to the best of our knowledge. However, the conditions of handling, storage, or misuse, are beyond our control, therefore, Muscle Products Corp. makes NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. This data is for information purposes only. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his/her own particular use.