Section 1. Identification

GHS product identifier: Mystik® JT-6® Hi-Temp Grease with Moly, NLGI No. 2
Synonyms: Lubricating grease;
          CITGO® Material Code: 665056002
          Former Name: Mystik® Tetrimalloy® Extreme Duty Grease NLGI No. 2
Code: 665056002
MSDS #: 665056002

Supplier’s details: CITGO Petroleum Corporation
                   P.O. Box 4689
                   Houston, TX 77210
                   sds vend@citgo.com

Emergency telephone number: Technical Contact: (800) 248-4684
                           Medical Emergency: (832) 486-4700
                           CHEMTREC Emergency: (800) 424-9300
                           (United States Only)

Section 2. Hazards identification

OSHA/HCS status: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture: Not classified.

GHS label elements

Signal word: Warning
Hazard statements: Injection under the skin can cause severe injury.
                  Most damage occurs in the first few hours.
                  Initial symptoms may be minimal.

Precautionary statements

General: Avoid contact with eyes, skin and clothing. May be harmful if swallowed. IF IN EYES: Rinse cautiously with water for several minutes. IF SWALLOWED: Do NOT induce vomiting. After handling, always wash hands thoroughly with soap and water. If you feel unwell, seek medical attention and show the label when possible. Keep out of reach of children.
Prevention: Not applicable.
Response: Not applicable.
Storage: Store in a dry place and/or in closed container. Store in accordance with all local, regional, national and international regulations.
Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazard not otherwise classified: Injection of petroleum hydrocarbons requires immediate medical attention.

Date of issue/Date of revision: 11/4/2014.
Date of previous issue: No previous validation.
Version: 1
Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of</td>
<td>Lubricating grease;</td>
</tr>
<tr>
<td>identification</td>
<td>CITGO® Material Code: 665056002</td>
</tr>
<tr>
<td></td>
<td>Former Name: Mystik® Tetrimoly® Extreme Duty Grease NLGI No. 2</td>
</tr>
</tbody>
</table>

**CAS number/other identifiers**

|CAS number               | Not applicable.               |

**Ingredient name**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymers</td>
<td>0.5 - 1.5</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

* = Various            ** = Mixture            *** = Proprietary

Any concentration shown as a range is to protect confidentiality or is due to process variation.

**Section 4. First aid measures**

**Description of necessary first aid measures**

**Eye contact**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion**: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute**

**Potential acute health effects**

**Eye contact**: No known significant effects or critical hazards.

**Inhalation**: No known significant effects or critical hazards.

**Skin contact**: Injection of pressurized hydrocarbons can cause severe permanent tissue damage. Initial symptoms may be minor.

**Ingestion**: No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

**Eye contact**: No specific data.

**Inhalation**: No specific data.

**Skin contact**: No specific data.

**Ingestion**: No specific data.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments**: Treat symptomatically and supportively.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)
Section 5. Fire-fighting measures

Specific hazards arising from the chemical: No specific fire or explosion hazard.

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known.

Hazardous thermal decomposition products: Decomposition products may include the following materials:
- carbon dioxide
- carbon monoxide
- sulfur oxides
- metal oxide/oxides

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Environmental precautions: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose via licensed waste disposal contractor.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For non-emergency personnel: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

For emergency responders: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**Bulk Storage Conditions:** Do not apply heat or flame to stockpiled material. Rotate stock to reduce the potential for hot spots. Do not store with oxidizers. Minimize dust creation by keeping material moist and/or covered.

Section 8. Exposure controls/personal protection

**Control parameters**

**Occupational exposure limits**

None identified.

**Appropriate engineering controls**

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Safety glasses with side shields. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead.

**Skin protection**

**Hand protection**

Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

**Physical state**

Solid. [Smooth texture]

**Color**

Dark gray to black.

**Odor**

Mild petroleum odor

**pH**

Not available.

**Boiling point**

Not available.

**Flash point**

Open cup: >150°C (>302°F) [Estimated]
### Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporation rate</td>
<td>&lt;1 (butyl acetate = 1)</td>
</tr>
<tr>
<td>Lower and upper explosive limits</td>
<td>Lower: 1%</td>
</tr>
<tr>
<td></td>
<td>Upper: 7%</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt;0.0013 kPa (&lt;0.01 mm Hg) [room temperature]</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt;1 [Air = 1]</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.94</td>
</tr>
<tr>
<td>Density lbs/gal</td>
<td>Estimated 7.84 lbs/gal</td>
</tr>
<tr>
<td>Gravity, °API</td>
<td>Estimated 19 @ 60 F</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in the following materials: cold water.</td>
</tr>
<tr>
<td>NLGI Grade</td>
<td>2</td>
</tr>
</tbody>
</table>

### Section 10. Stability and reactivity

**Reactivity**: Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

**Chemical stability**: The product is stable.

**Possibility of hazardous reactions**: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid**: No specific data.

**Incompatible materials**: No specific data.

**Hazardous decomposition products**: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### Section 11. Toxicological information

#### Information on toxicological effects

**Acute toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymers</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Distillates (petroleum), hydrotreated heavy naphthenic. Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. Distillates (petroleum), hydrotreated heavy paraffinic. Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. Molybdenum disulphide. In general, insoluble compounds of molybdenum, such as molybdenum disulfide, exhibit a low order of toxicity. Molybdenum disulfide dust can cause eye, skin and respiratory tract irritation due to frictional action. Other effects of molybdenum disulfide dusts and mists are similar to those of nuisance particulates. In acute ingestion studies with rats and guinea pigs, no fatalities were reported when doses of molybdenum disulfide as high as 6.0 grams per kilogram of body weight. In a subchronic oral study, no signs of toxicity appeared in rats receiving molybdenum...
Section 11. Toxicological information

Disulfide at 10 to 500 milligrams of molybdenum disulfide per animal per day. In an experimental study, guinea pigs were exposed to an average concentration of 286 milligrams of molybdenum disulfide dust per cubic meter for one hour per day, five days per week for five weeks. Of the 25 animals studied, one animal died within three days; the appearance of the other animals was normal.

**Distillates (petroleum), solvent-refined heavy paraffinic**: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipid granuloma formation and lipid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

### Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymers</td>
<td>Respiratory - Mild irritant</td>
<td>Human</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

- **Skin**: No additional information.
- **Eyes**: No additional information.
- **Respiratory**: No additional information.

### Sensitization

- **Skin**: No additional information.
- **Respiratory**: No additional information.

### Mutagenicity

**Conclusion/Summary**: No additional information.

### Carcinogenicity

**Conclusion/Summary**: Distillates (petroleum), solvent-refined heavy paraffinic: In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

### Reproductive toxicity

**Conclusion/Summary**: No additional information.

### Teratogenicity

**Conclusion/Summary**: No additional information.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

- Routes of entry anticipated: Dermal.

### Potential acute health effects

- **Eye contact**: No known significant effects or critical hazards.
- **Inhalation**: No known significant effects or critical hazards.
- **Skin contact**: Injection of pressurized hydrocarbons can cause severe permanent tissue damage. Initial symptoms may be minor.
- **Ingestion**: No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

- **Eye contact**: No specific data.
- **Inhalation**: No specific data.
Section 11. Toxicological information

Skin contact : No specific data.
Ingestion : No specific data.

Potential chronic health effects
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity
Conclusion/Summary : Not available.

Persistence and degradability
Conclusion/Summary : Not available.

Bioaccumulative potential
Not available.

Mobility in soil
Soil/water partition coefficient (Koc) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Not regulated.</td>
<td>Not available.</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>-</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Section 14. Transport information

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th>-</th>
<th>Not available.</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing group</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>Additional information</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Special precautions for user: **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

Section 15. Regulatory information

U.S. Federal regulations: United States inventory (TSCA 8b): All components are listed or exempted.

- **Clean Water Act (CWA) 307**: zinc compound
- **Clean Water Act (CWA) 311**: xylene

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

SARA 302/304
Composition/information on ingredients
- SARA 304 RQ: Not applicable.

SARA 311/312
Classification: Not applicable.
Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
</table>

State regulations
- Massachusetts: The following components are listed: molybdenum disulphide
- New York: None of the components are listed.
- New Jersey: None of the components are listed.
- Pennsylvania: None of the components are listed.

California Prop. 65

**WARNING**: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Date of issue/Date of revision: 11/4/2014.
Date of previous issue: No previous validation.
Version: 1.
Section 15. Regulatory information

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>Cancer</th>
<th>Reproductive</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>cumene</td>
<td>&lt;0.01</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

International regulations

International lists

Australia inventory (AICS): All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: Not determined.
Korea inventory: All components are listed or exempted.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
Taiwan inventory (CSNN): Not determined.

Canada inventory

EU Inventory

At least one component is not listed in EINECS but all such components are listed in ELINCS.
Please contact your supplier for information on the inventory status of this material.

WHMIS (Canada)

Not controlled under WHMIS (Canada).

Section 16. Other information

National Fire Protection Association (U.S.A.)

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue/Date of revision: 11/4/2014.

Key to abbreviations:

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
UN = United Nations

Notice to reader
Section 16. Other information

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