



Material Safety Data Sheet

Bio Grease

1. Product and company identification

Product name : Bio Grease
Material uses : Bicycle lubricant.
Supplier/Manufacturer : Pedro's Incorporated
 600 Research Drive
 Wilmington, Massachusetts 01887
Validation date : 12/01/2008
Responsible name : Atrion Regulatory Services, Inc.
In case of emergency : CHEMTREC International: +1 (703) 527-3887
 24/7

2. Hazards identification

Physical state : Grease.
Odor : Mild.
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.
Emergency overview : NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.
 No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.
Potential acute health effects
Inhalation : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.
Skin : No known significant effects or critical hazards.
Eyes : No known significant effects or critical hazards.
Potential chronic health effects
Chronic effects : 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.
Over-exposure signs/symptoms
Inhalation : No specific data.
Ingestion : No specific data.
Skin : No specific data.
Eyes : No specific data.
Medical conditions aggravated by over-exposure : None known.
See toxicological information (section 11)

3 . Composition/information on ingredients

United States

| Name | CAS number | % |
|----------------------------|------------|----------|
| Biodegradable base oil | 68956-68-3 | 60 - 100 |
| Aluminum benzoate stearate | 68815-27-0 | 10 - 30 |
| Calcium Carbonate | 471-34-1 | 5 - 10 |

Canada

| Name | CAS number | % |
|----------------------------|------------|----------|
| Biodegradable base oil | 68956-68-3 | 60 - 100 |
| Aluminum benzoate stearate | 68815-27-0 | 10 - 30 |
| Calcium Carbonate | 471-34-1 | 5 - 10 |

Mexico

| Name | UN number | IDLH | Classification | | | | CAS number | % |
|----------------------------|----------------|------|----------------|---|---|---------|------------|---------|
| | | | H | F | R | Special | | |
| Aluminum benzoate stearate | Not regulated. | - | 0 | 0 | 0 | | 68815-27-0 | 10 - 30 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.
- Skin contact** : Wash with soap and water. Get medical attention if symptoms occur.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

- Flammability of the product** : No specific fire or explosion hazard.
- Extinguishing media**
 - Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
 - Not suitable** : None known.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides
aldehydes
- 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.

6 . Accidental release measures

- Personal precautions** : 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 (see section 8).
- Environmental precautions** : 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 for 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.

7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). 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.
- Storage** : 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.

8 . Exposure controls/personal protection

United States

Product name

Biodegradable base oil

Exposure limits**OSHA PEL 1989 (United States, 3/1989).**TWA: 5 mg/m³ 8 hour(s). Form: Respirable fractionTWA: 15 mg/m³ 8 hour(s). Form: Total dust**NIOSH REL (United States, 6/2008).**TWA: 10 mg/m³ 10 hour(s). Form: Mist/Total dustTWA: 5 mg/m³ 10 hour(s). Form: Mist/Respirable fraction

Aluminum benzoate stearate

ACGIH TLV (United States, 1/2008).TWA: 10 mg/m³ 8 hour(s).**OSHA PEL 1989 (United States, 3/1989).**TWA: 2 mg/m³, (Al) 8 hour(s).**NIOSH REL (United States, 6/2008).**TWA: 2 mg/m³, (Al) 10 hour(s).

Calcium Carbonate

OSHA PEL (United States, 11/2006).TWA: 5 mg/m³ 8 hour(s). Form: Respirable fractionTWA: 15 mg/m³ 8 hour(s). Form: Total dust

8 . Exposure controls/personal protection

Canada

Product name

Biodegradable base oil

Aluminum benzoate stearate

Calcium Carbonate

Exposure limits
CA Quebec Provincial (Canada, 6/2008).

 TWAEV: 10 mg/m³ 8 hour(s). Form: Mist

CA Quebec Provincial (Canada, 6/2008).

 TWAEV: 2 mg/m³, (Al) 8 hour(s).

CA Alberta Provincial (Canada, 6/2008).

 8 hrs OEL: 2 mg/m³, (Al) 8 hour(s).

CA British Columbia Provincial (Canada, 6/2008).

 TWA: 2 mg/m³, (Al) 8 hour(s).

CA Ontario Provincial (Canada, 6/2008).

 TWAEV: 2 mg/m³ 8 hour(s).

 TWAEV: 10 mg/m³ 8 hour(s). Form: Total dust

CA Quebec Provincial (Canada, 12/2006).

 TWAEV: 10 mg/m³ 8 hour(s). Form: Total dust

CA Alberta Provincial (Canada, 10/2006).

 8 hrs OEL: 10 mg/m³ 8 hour(s).

CA Ontario Provincial (Canada, 3/2007).

 TWAEV: 10 mg/m³ 8 hour(s).

Mexico

Product name

Aluminum benzoate stearate

Exposure limits
NOM-010-STPS (Mexico, 9/2000).

 LMPE-PPT: 2 mg/m³ 8 hour(s).

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures

: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

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.

Personal protection
Eyes

: Safety glasses.

Skin

: Not applicable.

Respiratory

: Not applicable.

Hands

: Natural rubber (latex).

Personal protective equipment (Pictograms)

HMIS Code/Personal protective equipment

: B

8 . Exposure controls/personal protection

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, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state : Grease.
Flash point : Open cup: >250°C (>482°F) [Cleveland.]
Color : Green.
Odor : Mild.
Vapor pressure : <0.0067 kPa (<0.05 mm Hg) @ 300°C
Solubility : Insoluble in water.

10 . Stability and reactivity

Stability : The product is stable.
Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid : No specific data.
Materials to avoid : Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Conditions of reactivity : None known.

11 . Toxicological information

Acute toxicity

| Product/ingredient name | Species | Dose | Result | Exposure |
|-------------------------|---------|------------|-----------|----------|
| Calcium Carbonate | Rat | 6450 mg/kg | LD50 Oral | - |

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin : No known significant effects or critical hazards.

Eyes : No known significant effects or critical hazards.

Carcinogenicity

Classification

| Product/ingredient name | ACGIH | IARC | EPA | NIOSH | NTP | OSHA |
|----------------------------|-------|------|-----|-------|-----|------|
| Aluminum benzoate stearate | A4 | - | - | - | - | - |

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.
 Biodegradability of >80% as measured by CEC L-33-T-82 test procedure. Based on actual data.

Aquatic ecotoxicity

| Product/ingredient name | Test | Species | Exposure | Result |
|-------------------------|------|---------|----------|---------------------------|
| Calcium Carbonate | - | Fish | 96 hours | Acute LC50 >56000000 ug/L |

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

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

AERG : Not applicable.

Regulatory information

DOT/ TDG / Mexico IMDG/ IATA : Not regulated.

15 . Regulatory information

United States

HCS Classification : Not regulated.

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

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Calcium Carbonate

SARA 311/312 MSDS distribution - chemical inventory - hazard identification

Calcium Carbonate: Immediate (acute) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention No products were found.

Clean Air Act (CAA) 112 regulated flammable substances No products were found.

Clean Air Act (CAA) 112 regulated toxic substances No products were found.

State regulations

: **Connecticut Carcinogen Reporting:** None of the components are listed.

Connecticut Hazardous Material Survey: None of the components are listed.

Florida substances: None of the components are listed.

Illinois Chemical Safety Act: None of the components are listed.

Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.

Louisiana Reporting: None of the components are listed.

Louisiana Spill: None of the components are listed.

Massachusetts Spill: None of the components are listed.

Massachusetts Substances: None of the components are listed.

Michigan Critical Material: None of the components are listed.

Minnesota Hazardous Substances: None of the components are listed.

New Jersey Hazardous Substances: None of the components are listed.

New Jersey Spill: None of the components are listed.

New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.

New York Acutely Hazardous Substances: None of the components are listed.

New York Toxic Chemical Release Reporting: None of the components are listed.

Pennsylvania RTK Hazardous Substances: The following components are listed:

Aluminum benzoate stearate

Rhode Island Hazardous Substances: None of the components are listed.

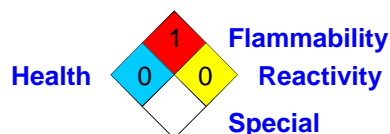
15 . Regulatory information

- California Prop. 65** : No products were found.
- Canada**
- WHMIS (Canada)** : Not controlled under WHMIS (Canada).
- Canadian lists** : **CEPA Toxic substances:** None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: None of the components are listed.
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.
- Canada inventory** : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

Classification :



International regulations

- International lists** : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16 . Other information

- Label requirements** : NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

Hazardous Material Information System (U.S.A.) :

| | |
|---------------------|---|
| Health | 0 |
| Fire hazard | 1 |
| Physical Hazard | 0 |
| Personal protection | B |

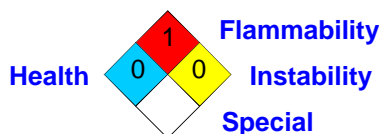
HAZARD RATINGS

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight
- 0- Minimal

See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.

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



- References** : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005. - Official Mexican Standards NOM-018-STPS-2000 and NOM-004-SCT2-1994.

Date of issue : 12/01/2008
Version : 1

16 . Other information

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.