SAFETY DATA SHEET

Issuing Date: January 1, 2024 Revision Date: January 1, 2024 Version 1

1. IDENTIFICATION

Product Name: BTS Micro-Armor 6000 Grease

Product ID: 6000

Product Type: Finished product

Recommended Use: Automotive and industrial lubrication applications

Restrictions on Use: Use only as directed on label.

Manufacturer: Bluewater Technology Solutions, LLC
1816 River Street
Jackson, MI 49202
(800) 531-2920

Email Address: info@micro-armor.com

Emergency Telephone: (800) 531-2920

2. HAZARD(S) IDENTIFICATION

EMERGENCY INFORMATION OVERVIEW

2.1 Physical Identification Information:

Physical State: Solid
Color: Brown
Odor: Slight petroleum smell

Physical / Chemical Hazards: No significant hazards.

Health Hazards: High-pressure injection under skin may cause serious damage.
Excessive exposure may result in eye, skin, or respiratory irritation.

Environmental Hazards: No significant hazards.

Precautionary Measures: Use gloves when handling any petroleum based lubricant product. Do not eat, drink, or smoke when using this product. Avoid contact with eyes. Wash thoroughly after handling.

Note: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

2.2	**HMIS Code**	Health: 1	Flammability: 1	Reactivity: 0
	NFPA Code	Health: 1	Flammability: 1	Reactivity: 0

2.3 Hazard Pictogram

HMIS Rating

Health = 1
Fire = 1
Reactivity = 0

NFPA Rating

Health = 1
Fire = 1
Reactivity = 0

3. COMPOSITON / INFORMATION ON INGREDIENTS

Name	**CAS Number**	**%**	**H**	**F**	**R**
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	30 - 50	1	1	0
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	20 - 40	1	1	0
Copper	7440-50-8	< 15	0	0	0
Elemental Lead	7439-92-1	< 15	1	0	0
Other proprietary materials	-	< 10	0	0	0

4. FIRST-AID MEASURES

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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.

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

Special exposure hazards: 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: Fire-fighters should wear appropriate protective equipment and appropriate breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Protective equipment and emergency procedures not required.
Protective gloves are recommended.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Clean up methods: Pick up mechanically.
Protective gloves are recommended.

See Section 7 for Safe Handling Information

See Section 8 for Personal Protection Equipment Information

See Section 13 for Disposal Information

7. HANDLING AND STORAGE

Handling: Protective gloves are recommended. 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. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

Ingredient	Exposure Limits
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**ACGIH TLV (United States, 6/2013).** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **NIOSH REL (United States, 10/2013).** TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist **OSHA PEL (United States, 2/2013).** TWA: 5 mg/m³ 8 hours.
Distillates (petroleum), hydrotreated heavy Naphthenic	**ACGIH TLV (United States, 6/2013).** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **NIOSH REL (United States, 10/2013).** TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist **OSHA PEL (United States, 2/2013).** TWA: 5 mg/m³ 8 hours.
Copper	**ACGIH TLV (United States, 6/2013).** TWA: 1 mg/m³, (as Cu) 8 hours. Form: Dust and mist TWA: 0.2 mg/m³ 8 hours. Form: Fume **OSHA PEL 1989 (United States, 3/1989).** TWA: 1 mg/m³, (as Cu) 8 hours. Form: Dusts and Mists TWA: 0.1 mg/m³, (as Cu) 8 hours. Form: Fume **NIOSH REL (United States, 10/2013).** TWA: 1 mg/m³, (as Cu) 10 hours. Form: Dusts and Mists **OSHA PEL (United States, 2/2013).** TWA: 1 mg/m³ 8 hours. Form: Dusts and Mists TWA: 0.1 mg/m³ 8 hours. Form: Fume

Elemental Lead	**NIOSH REL** TWA (8-hour) 0.050 mg/m^3 **OSHA PEL** [1910.1025] TWA 0.050 mg/m^3

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. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

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

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.

Ventilation measures: Product should be used in a well ventilated area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Any data represents typical values and is not intended to be specifications

Appearance:	brown
Physical state:	semi-solid
Odor:	petroleum
PH:	Not applicable
Boiling point:	Not available
Melting point:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Volatility:	Not available
Evaporation rate:	Not available
Solubility:	Insoluble in water
Flammability:	Not applicable
Auto-igniting:	Not self-igniting
Danger of explosion:	No explosion hazard

10. STABILITY AND REACTIVITY

Chemical stability: The product is stable.

Conditions to avoid: No specific data

Incompatible materials: Not specific data

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

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

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Name	Result	Species	Dose	Exposure
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg >5000 mg/kg	- -
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5000 mg/kg	-
Copper	LD50 Oral	Rat	472 mg/kg	-
Elemental lead	LD50 Dermal LD50 Oral	Rat Rat	>2000 mg/kg >2000 mg/kg	- -

Conclusion: Minimal significant effects or critical hazards when used properly with recommended safe handling procedures.

Warning: This product contains elemental lead and not organic lead. Product is supplied in a mixture or solution a represents minimal or no inhalation exposure. Use protective gloves when handling any petroleum based lubricant product.

Accute Toxicity: Acute symptoms of lead poisoning are seizures, comas, and cardiorespiratory arrest. Introduction of product to the bloodstream, including contact with open wounds should be avoided.

Chronic Toxicity: Contains material that may cause target organ damage, based on animal data.

Chronic symptoms of lead poisoning are impaired blood making, and reproductive and urinary systems issues.

Irritation/Corrosion

Skin No known significant effects or critical hazards. Protective gloves are recommended.

Eyes May cause eye irritation.

Respiratory Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation. Pre-existing respiratory disorders may be aggravated by over-exposure to this product. Prodoct is supplied in a mixture or solution a represents minimal or no inhalation exposure.

12. ECOLOGICAL INFORMATION (non-mandatory)

Toxicity All acute aquatic toxicity studies on samples of lubricant base oils show acute toxicity values greater than 100 mg/L for invertebrates, algae and fish. These tests were carried out on water accommodated fractions and the results are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon compositions.

Persistence and Degradability: The hydrocarbons in this material are not readily biodegradable, but since they can be degraded by microorganisms, they are regarded as inherently biodegradable.

Bioaccumulative Potential: Log Kow values measured for the hydrocarbon components of this material are greater than 5.3, and therefore regarded as having the potential to bioaccumulate. In practice, metabolic processes may reduce bioconcentration.

Mobility in Soil: Volatilization to air is not expected to be a significant fate process due to the low vapor pressure of this material. In water, base oils will float and spread over the surface at a rate dependent upon viscosity. There will be significant removal of hydrocarbons from the water by sediment adsorption. In soil and sediment, hydrocarbon components will show low mobility with adsorption to sediments being the predominant physical process. The main fate process is expected to be slow biodegradation of the hydrocarbon constituents in soil and sediment.

13. DISPOSAL CONSIDERATIONS (non-mandatory)

Waste disposal 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.

Small quantity disposal: Smaller quantities may be disposed of with normal household/shop waste.

Empty container disposal: Disposal should be according to local regulations.

14. TRANSPORT INFORMATION (non-mandatory)

Land: Not regulated for land transportation.

Sea: Not regulated for sea transportation.

Air: Not regulated for air transportation.

15. REGULATORY INFORMATION (non-mandatory)

HCS Classification: Target organ effects

US Federal Regulations:

TSCA 8(a) Pair: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

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

SARA 302/304: No products were found.

SARA 311/312 Hazards identification: Delayed (chronic) health hazard

Clean Water Act (CWA) 307: copper; Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts; tris(dipentyldithiocarbamato-S,S')antimony

Chemicals known to cause cancer: 7439-92-1 Elemental lead

16. OTHER INFORMATION

Disclaimer: All information in this Material Safety Data Sheet is believed to be accurate and reliable. However, no guarantee or warranty of any kind is made with regard to the accuracy of information or the suitability of the recommendations contained herein. It is the user's responsibility to assess the safety and toxicity of this product under their own conditions of use and to comply with all applicable laws and regulations.