



MATERIAL NAME: ATS K05 Extreme Pressure Synthetic Grease (ATS Part # 11139101)
EMERGENCY TELEPHONE NO: (800) 423-4651

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

MANUFACTURER'S NAME: ATS Systems
ADDRESS: 30222 Esperanza
Rancho Santa Margarita, Ca 92688

Revision date: 2007/10/01

GENERAL DESCRIPTION: Organic grease
PHYSICAL FORM: Grease
COLOR: Charcoal gray
ODOR: Slight odor

NFPA Profile: Health 1 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

2. OSHA HAZARDOUS COMPONENTS

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
68649-42-3	1.0 – 5.0	Zinc dialkyldithiophosphate

The above components are hazardous as defined in 29 CFR 1910.1200.

3. EFFECTS OF OVEREXPOSURE

Acute Effects

Eye: Direct contact may cause mild irritation

Skin: No significant irritation expected from a single short-term exposure.

Inhalation: Irritates respiratory passages very slightly.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged exposure may cause irritation.

Inhalation: No known applicable information.



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Oral: Repeated ingestion or swallowing large amounts may injure internally.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to section 11 for the detailed toxicology information.

4. FIRST AID MEASURES

Eye: Immediately flush with water for 15 minutes

Skin: No first aid should be needed

Inhalation: No first aid should be needed

Oral: Get medical attention

Comments: Treat according to person's condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable.

Autoignition Temperature: Not determined

Flammability limits in air: Not determined

Extinguishing Media: On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.

Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

Unusual Fire Hazards: None.



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Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Metal oxides, Carbon oxides and traces of incompletely burned carbon compounds. Sulfur oxides. Nitrogen oxides. Phosphorous oxides. Formaldehyde.

6. ACCIDENTAL RELEASE MEASURES

Containment / Clean up: Observe all personal protection equipment recommendations described in Section 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since some silicone materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to release and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call ATS Systems (800) 423-4651, if additional information is required.

7. HANDLING AND STORAGE

Use with adequate ventilation. Avoid eye contact. Do not take internally.

Use reasonable care and store away from oxidizing materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

There are no components with workplace exposure limits.

Engineering Controls

Local Ventilation: None should be needed.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection – safety glasses as a minimum.

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Skin: Washing at mealtime and end of shift is adequate.
Suitable Gloves: No special protection needed.
Inhalation: No respiratory protection should be needed.
Suitable Respirator: None should be needed.

Personal Protective Equipment for Spills

Eyes: Use proper protection – safety glasses as a minimum.
Skin: Washing at meal time and end of shift is adequate.
Inhalation/Suitable: No respiratory protection should be needed.
Respirator
Precautionary Measures: Avoid eye contact. Do not take internally. Use reasonable care.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Grease
Color: Charcoal gray
Odor: Slight odor
Specific Gravity @ 25°C: 0.87
Viscosity: Not determined.
Freezing/Melting Point: Not determined.
Boiling Point: Not determined
Vapor Pressure @ 25°C: Not determined.
Vapor Density: Not determined
Solubility in Water: 0 g/l
pH: Not determined
Volatile Content: 0.00%

Note: The above information is not intended for use in preparing product specifications. Contact ATS Systems, before writing specifications.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.
Hazardous Polymerization: Hazardous polymerization will not occur.



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Conditions to avoid: None.

Materials to avoid: Oxidizing material can cause a reaction.

11. TOXICOLOGICAL INFORMATION

Special Hazard Information on Components

No known applicable information.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	≤ 1	>1 and ≤100	>100
Acute Terrestrial Toxicity	≤100	>100 and ≤2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p. 34, 1993

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal.

14. TRANSPORT INFORMATION

DOT Road Shipment Information (IMDG)



MATERIAL NAME: ATS Systems KO5 Extreme Pressure Synthetic Grease

Not subject to IMDG code.

Ocean Shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.

15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempt from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances:

None.

Section 304 CERCLA Hazardous Substances:

None.

Section 312 Hazard Class:

Acute: No
Chronic: No
Fire: No
Pressure: No
Reactive: No

Section 313 Toxic Chemicals:

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
68649-42-3	1.0	Zinc dialkyldithiophosphate

Supplemental State Compliance Information

California

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Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None Known

Massachusetts

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
68649-42-3	1.0 – 5.0	Zinc dialkyldithiophosphate
1317-33-5	1.0 – 5.0	Molybdenum disulfide

New Jersey

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
68037-01-4	>60.0	Hydrogenated decene homopolymer
68815-49-6	10.0 – 30.0	Hydroxystearate sebacate lithium complexes
9003-29-6	10.0 – 30.0	Polybutene
25087-34-7	3.0 – 7.0	1-Butene, polymer with ethylene
1317-33-5	1.0 – 5.0	Molybdenum disulfide
68649-42-3	1.0 – 5.0	Zinc dialkyldithiophosphate
64742-52-5	<1.0	Hydrotreated heavy naphthenic petroleum distillate

Pennsylvania

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
68037-01-4	>60.0	Hydrogenated decene homopolymer
68815-49-6	10.0 – 30.0	Hydroxystearate sebacate lithium complexes
9003-29-6	10.0 – 30.0	Polybutene
25087-34-7	3.0 – 7.0	1-Butene, polymer with ethylene



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1317-33-5	1.0 – 5.0	Molybdenum disulfide
68649-42-3	1.0 – 5.0	Zinc dialkyldithiophosphate

16. OTHER INFORMATION

Prepared by: ATS Systems.

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.