

SUPPLIER NOOK INDUSTRIES, INC. 4950 East 49th Street Cleveland, Ohio 44125-1016

DATE OF LAST REVIEW: 15-FEBRUARY-07

DATE OF PREPARATION: 01-NOVEMBER-03

Section 1 – PRODUCT IDENTIFICATION

PRODUCT PART NUMBER:

NLU-1001 - 1 lb. Can / NLU-2000 - 0.45 oz. packets PRODUCT NAME: PAG-1 and PAG-45 Acme Screw Grease PRODUCT CLASS: Grease

Section 2 – COMPOSITION INGREDIENTS

30-50

15-30 0-2

20-40

% by WT

INGREDIENT Base Oil Calcium Sulfonate Zinc Compound

Exposure Limits: None established

Section 3 – HAZARDS IDENTIFICATION

APPEARANCE / ODOR

Proprietary Additives

Tan to brown solid / mild petroleum hydrocarbon odor.

OSHA REGULATORY STATUS This material is not known to be hazardous under OSHA Regulations.

POTENTIAL HEALTH EFFECTS

Primary Route of Entry: Skin

The product, as with many petroleum products, may cause minor skin, eye, and lung irritation, but good hygienic practices can minimize these effects.

CARCINOGENICITY INFORMATION

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Section 4 – FIRST AID MEASURES

EYE CONTACT: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. SKIN CONTACT: Wash skin thoroughly with soap and water. If irritation develops and persists, consult a physician.

If injected under the skin, necrosis could occur. See physician.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration.

If breathing is difficult, give oxygen. Call a physician.

INGESTION: If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

NOTE TO PHYSICIANS: Activated charcoal mixture may be administered To prepare activated charcoal mixture, suspend 50 grams activated charcoal in 400 mL water and mix thoroughly. Administer 5 mL/kg, or 350 mL for an average adult. High velocity injection under the skin can cause a bloodless puncture wound and result in necrosis. Immediate attention by a surgical specialist is recommended.

TRANSPORTATION EMERGENCY Chemtrec - (800) 424-9300

PAG-1 and PAG-45 ACME SCREW GREASE

MEDICAL EMERGENCY Chemtrec - (800) 424-9300

MATERIAL DATA SAFETY SHEET

PRODUCT INFORMATION (216) 271-7900

> HMIS RATING Health: 1 Flammability: 1 Reactivity: 0

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Section 5 – FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash Point (Base Oil):550 F (288 C)Method:Cleveland Open Cup - COC.Autoignition:Not AvailableNFPA Rating:Health 0Flammability 1Reactivity 0

EXTINGUISHING MEDIA

Water Spray, Foam, Dry Chemical, CO2.

FIRE FIGHTING INSTRUCTIONS

Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water may be used to flush spills away from exposures. Products of combustion may contain carbon monoxide, carbon dioxide, and other toxic materials. Do not enter enclosed or confined space without proper protective equipment including respiratory protection.

Section 6 – ACCIDENTAL RELEASE MEASURES

SAFEGUARDS (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before

proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

SPILL CLEAN UP

Recover undamaged and minimally contaminated material for reuse and reclamation. Soak up with sawdust, sand, oil dry or other absorbent material. Shovel or sweep up.

Section 7 – HANDLING AND STORAGE

HANDLING:

(Personnel) Avoid breathing vapors or mist. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Wash contaminated clothing prior to reuse.

(Physical Aspects) Close container after each use. Do not pressurize, cut, weld, braze, solder, grind, or drill on or near full or empty container. Empty container retains residue (liquid and/or vapor) and may explode in heat of a fire.

STORAGE:

Store in accordance with National Fire Protection Association recommendations.

Store away from oxidizers, heat, sparks and flames.

Section 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

VENTILATION - Normal shop ventilation.

Personal Protective Equipment

RESPIRATORY PROTECTION - None normally required except under unusual circumstances such as described under Fire Fighting Measures.

PROTECTIVE GLOVES - Should be worn when the potential exists for prolonged or repeated skin contact. Nitrile recommended EYE PROTECTION - Safety glasses with side shields.

OTHER PRECAUTIONS - Avoid prolonged skin contact by practicing good personal hygiene and laundering contaminated clothing. Exposure Limits

OSHA PEL: None Established

ACGIH TLV: None Established

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: COLOR: ODOR: EVAPORATION RATE: SPECIFIC GRAVITY: DENSITY @ 60 F (16C):

Solid Tan to Brown Petroleum Hydrocarbon (Mild) NIL Not Available 8.5-8.6 lb/gal VAPOR PRESSURE: VAPOR DENSITY: % VOLATILES: BOILING POINT: SOLUBILITY IN WATER:

NIL >1 (air = 1.0) NIL Not Available Insoluble



Section 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable. CONDITIONS TO AVOID: Heat, sparks, and flames. INCOMPATIBILITY (MATERIALS TO AVOID): Incompatible or can react with strong oxidizers. DECOMPOSITION: Incomplete combustion may produce carbon monoxide; combustion may form oxides of carbon and sulfur. POLYMERIZATION: Will not occur.

Section 11 – TOXICOLOGICAL DATA

ANIMAL DATA

Mouse skin painting studies have shown that highly refined petroleum lube base oils similar to ingredients in this product have not caused skin tumors. Animal skin exposure studies show high concentrations of zinc organic phosphates cause testicular atrophy, but this effect appears related to stress from the chemical causing severe skin irritation. Low concentrations of the zinc component, as occurs in lubricant products, would be unlikely to cause testicular damage.

Section 12 – ECOLOGICAL INFORMATION

Ecotoxicological Information

No specific aquatic data available for this product.

Section 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

CONTAINER DISPOSAL

Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner.

Section 14 – TRANSPORT INFORMATION

USA DOT: NOT REGULATED ICAO/IMO: NOT RESTRICTED

Section 15 – REGULATORY INFORMATION

U.S. Federal Regulations

OSHA HAZARD DETERMINATION This material is not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200. CERCLA/SUPERFUND Not applicable; this material is covered by the CERCLA petroleum exclusion.

SARA, TITLE III, 302/304 Extremely Hazardous Substance: None

SARA, TITLE III, 311/312 Acute: No Chronic: No Fire: No Reactivity: No Pressure: No

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SARA, TITLE III, 313

This material contains the following chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and is subject to toxic chemical release reporting requirements: Toxic Chemical: Zinc Compound. CAS Number: Mixture

TSCA

Material and/or components are listed in the TSCA Inventory of Chemical Substances (40 CFR 710).

RCRA

This material has been evaluated for RCRA characteristics and does not meet hazardous waste criteria if discarded in its purchased form. Because of product use, transformation, mixing, processing, etc., which may render the resulting material hazardous, it is the product user's responsibility to determine at the time of disposal whether the material meets RCRA hazardous waste criteria.

CLEAN WATER ACT

The material contains the following ingredient(s) which is considered hazardous if spilled into navigable waters and therefore reportable to the National Response Center (1-800-424-8802).

Ingredient: Petroleum Hydrocarbons.

Reportable Quantity: Film or sheen upon or discoloration of any water surface.

State Regulations (U.S.)

CALIFORNIA "PROP 65" This material is not known to contain any ingredient(s) subject to the Act.

PENNSYLVANIA WORKER & COMMUNITY RIGHT TO KNOW ACT

This material may contain the following ingredient(s) subject to the Pennsylvania Worker and Community Right to Know Hazardous Substances List. Ingredient : Zinc Compound CAS Number : Mixture Category: Environmental Hazardous Substance

Canadian Regulations This is not a WHMIS Controlled Product.

Section 16 – OTHER INFORMATION

USE: Acme Screw Lubrication