Material Safety Data Sheet

Section 1 Product and Company Identification

Product Name: E-Z Break Anti-Seize Paste,

Nickel & Nuclear Grades

Revision #: ∠.∠ Date Prepared: September 7, 1995 Date Revised: February 5, 2010

Manufacturer:

LA-CO INDUSTRIES, Inc./Markal Co.

1201 Pratt Blvd.

Elk Grove Village, IL, USA

60007-5746

Information Telephone: 847-956-7600 Emergency Telephone: Call CHEMTREC

USA 800-424-9300

International (Call Collect) 1-703-527-3887

Chemical Formula: Mixture

CAS No.: Not Applicable. Derivation: Not Applicable.

Synonyms: Not Applicable.

General Use: High temperature anti-seize and lubricating

compound.

Supplier/Importer:

Section 2 Composition/Information on Ingredients

Ingredient CAS No. %

Nickel ^{1,2,3,4,5,6} 7440-02-0 20

EPA: CERCLA RQ = 100 lbs.; EPCRA section 313 de minimus concentration = 0.1%

SARA: Health Assessment Rank = 47

Graphite ^{3,5} 7782-42-5 30

ACGIH PEL: TWA = $2mg/m^3$ (respirable fraction of dust)

(For Section 2 footnotes: See Section 15)

Section 3 Hazards Identification

EMERGENCY OVERVIEW: WARNING: CONTAINS NICKEL POWDER WHICH IS A SUSPECTED CARCINOGEN WHEN DUSTING OR VAPORIZING. AVOID BREATHING HOT FUMES OR DUST WHEN USING THIS PRODUCT.

POTENTIAL HEALTH EFFECTS

Primary Exposure Routes: Inhalation.

Acute Effects

Eyes: Direct contact may be irritating.

Skin: Not applicable.

Ingestion: May lead to gastro-intestinal irritation.

Inhalation: Hot vapors may be irritating.

Chronic Effects
Eyes: Not applicable.

Skin: Prolonged contact may cause minor irritation.

Ingestion: Not applicable.

Inhalation: Nickel dust and powder have been listed as suspected carcinogens by inhalation. Do not

breath dust, powder or hot fumes that may be generated by using this product.

Carcinogenicity: The following information refers to Nickel:

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NTP: Anticipated carcinogen.

IARC: Possible human carcinogen (Group 2B); human evidence is inadequate; animal evidence is sufficient.

WARNING This product contains a chemical known to the State of California to cause cancer.

Target Organ Effects: Not Applicable.

Medical Conditions Aggravated by Long-Term Exposure: Sensitive individuals may experience an allergic skin rash.

Other Information: E-Z BREAK NICKEL/NUCLEAR GRADE WAS TESTED BY AN INDEPENDENT TESTING LABORATORY AND FOUND TO BE NON-TOXC BY INGESTION AND NON-IRRITATING TO THE SKIN AND EYES WHEN TESTED IN ACCORDANCE WITH THE U.S. FEDERAL HAZARDOUS LABELING ACT.

Section 4 First Aid

Eye Contact: Flush with water for at least 15 minutes. **Skin Contact:** Wash thoroughly with soap and water.

Ingestion: If large amount is swallowed, induce vomiting, consult physician.

Inhalation: Remove victim to fresh air. Get medical attention for any breathing difficulty.

Other Information: Not applicable.

Section 5 Fire Fighting Measures

Flash Point (method): 380°F/193°C (coc) Autoignition Temperature: Not determined. LEL: Not Determined. Flammability Classification: Not determined.

Extinguishing Media: Water fog, dry chemical, carbon dioxide, foam.

Hazardous Combustion Products: A fire could release nickel powder or fume, a suspected carcinogen.

Carbon monoxide may be released.

Unusual Fire or Explosion Hazards: : A fire could release nickel powder or fume, a suspected

carcinogen.

Fire-Fighting Instructions/Equipment: Keep personnel removed and upwind of any fire. Wear full fire-

fighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

Section 6 Accidental Release Measures

Use recommended personal protective equipment (see Section 8).

Small and Large Spill: CAUTION: Spill area may be slippery. Scoop up and place in waste container. Wipe up remainder with a suitable absorbent, towel or rag. Wash spill area with soap and water solution.

Section 7 Handling and Storage

Handling Precautions: Use recommended personal protective equipment (see Section 8). Wash thoroughly after handling.

Storage Requirements: Store away from incompatible chemicals (see Sec. 10). Store in a cool, dry area.

Section 8 Exposure Controls/Personal Protection

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Eye/Face Protection: Safety glasses or goggles recommended as good industrial practice.

Skin/Hand Protection: Rubber gloves recommended for sensitive individuals.

Respiratory Protection: None normally needed under expected use conditions. Use NIOSH approved

respirator if any powder, dust or fume is generated.

Other Equipment: Eye wash and safety shower.

Engineering Controls: Normal room ventilation. Local exhaust in confined areas where fumes may be

generated.

Administrative Controls: Users of this product must be properly trained and qualified in its use.

Other Information: Not applicable.

Section 9 Physical and Chemical Properties

Appearance/Physical State: Silver-gray colored paste.

Odor: Grease-like.

Odor Threshold (ppm): Not Determined.

Specific Gravity (H₂O = 1): 1.27 Solubility - Water: Insoluble. - Fat: Soluble.

Coefficient of Water/Oil Solubility: <<1
Partition Coefficient (n-octanol/water): >>1

pH: Not applicable.

Melting Point: Not determined. Boiling Point: Not determined.

Vapor Pressure (mm Hg at 20°C): Not applicable.

Vapor Density (Air = 1): Not applicable.

Evaporation Rate (n-BuAc=1): Not applicable. **V.O.C.:** 0%(w/w), 0%(v/v), 0 lbs./gal.(U.S.), 0 kg/l

Flash Point (method): (see Section 5)
Autoignition Temperature: (see Section 5)
Flammability Classification: (see Section 5)

Unusual Fire or Explosion Hazards: (see Section 5)

Oxidizing Properties: Not Applicable.

Other Information: None.

Section 10 Stability and Reactivity

Chemical Stability: Stable.

Hazardous Polymerization: Will not occur. Conditions to Avoid: None known.

Chemicals to Avoid: Oxidizers, strong acids.

Hazardous Decomposition Products (non-thermal): None known.

Section 11 Toxicological Information

Sensitization to Product: Not Applicable. Irritancy of Product: Not Applicable. Reproductive Toxicity: Not Applicable.

Teratogenicity: Not Applicable. **Mutagenicity:** Not Applicable.

Further hazard information, if applicable, may be found in Section 3. Toxicological information regarding individual ingredients, if applicable, may be found in Section 2.

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Section 12 Ecological Information

Mobility: Not Determined.

Degradability: Not Determined.

Accumulation: Not Determined.

Ecotoxicity: Not Determined.

Other Adverse Effects: Not Determined.

Section 13 Disposal Considerations

Dispose of in accordance with applicable federal, state, and local regulations.

Section 14 Transport Information

D.O.T. (U.S.)

Proper Shipping Name: Petroleum Grease, Item 155250

Hazard Class or Division: Not Regulated.

Hazard Label: Not Regulated.
I.D. Number: Not Regulated.
TDG (Canada): Not Regulated.

IATA: Not Regulated. ICAO: Not Regulated. IMO: Not Regulated.

Australian Code for the Transport of Dangerous Goods

Dangerous Goods Class and Subsidiary Risk: Not Determined.

Section 15 Regulatory Information

Footnotes for Section 2:

- 1 Subject to the reporting requirements of SARA Title III, Section 313.
- 2 Appears on the California Safe Drinking Water and Toxic Enforcement Act Substances List.
- 3 Appears on the Massachusetts Substances List.
- 4 Appears on the New Jersey Right-To-Know Hazardous Substances List.
- 5 Appears on the Pennsylvania Hazardous Substances List.
- 6 Appears on the Canadian WHMIS Ingredient Disclosure List.

U.S.A.

OSHA Hazard Status: This product is considered to be hazardous as defined by the U.S. OSHA HCS (29 CFR 1910.1200).

EPA SARA sec. 311/312 Hazard Categories: Chronic.

Toxic Substances Control Act (TSCA): All ingredients contained in this product are listed on the U.S. EPA TSCA Chemical Substance Inventory.

California Prop. 65: WARNING This product contains a chemical known to the State of California to cause cancer.

HMIS Rating: Health 1*, Flammability 1, Reactivity 0 **NFPA Rating:** Health 2, Flammability 1, Reactivity 0

CANADA

WHMIS Status: This product is considered to be hazardous as defined by Canadian WHMIS Controlled Products Regulations.

WHMIS Rating: D-2A.

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WHMIS Risk Phrases: WARNING: Contains nickel powder which is a suspected carcinogen when dusting or vaporizing.

WHMIS Precautionary Statements: Avoid breathing hot fumes or dust when using this product.

Domestic Substances List (DSL): All ingredients contained in this product are listed on the Canadian EPA (CEPA) Domestic Substances List (DSL).

E.U.

European Inventory of Existing Chemical Substances (EINECS): All ingredients contained in this product are listed on the European Inventory of Existing Chemical Substances (EINECS).

Categories of Danger (Labeling Information): Toxic (T).

Risk (R) Phrases: May cause cancer by inhalation (R49).

Safety (S) Phrases: Keep out of reach of children (S2), Do not breath fumes (S23), Avoid exposure - Obtain special instructions before use (S53).

AUSTRALIA

Worksafe Australia Status: This product classified as hazardous according to criteria of Worksafe Australia.

HAZCHEM Code (Australia): Not determined.

Poisons Schedule Number (Australia): Not determined.

Further regulatory information regarding individual ingredients, if applicable, may be found in Section 2.

This product has been classified in accordance with the hazard criteria of the U.S. OSHA Hazard Communication Standard, the Canadian WHMIS Controlled Products Regulations, the British CHIP2 regulation 6, and the Australian NMRCWHS. This MSDS contains the information required by the above regulations and conforms to ANSI Z400.1-1993.

Section 16 Other Information

MSDS Prepared By: Director of Chemical Safety

The information contained herein is based on data available to us and is accurate and reliable to the best of our knowledge and belief. However, LA-CO Industries, Inc. makes no representations as to its completeness or accuracy. Information is supplied on condition that persons receiving such information will make their own determination as to its suitability for their purposes prior to use. In no event will LA-CO Industries, Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon the information contained herein.