

SAFETY DATA SHEET

Product: 641-EV
Revision Date: 6/01/2015

1. MATERIAL IDENTIFICATION

Product Name: Heat-Away 641-EV
Product Description: Silver Paste, Odorless
Product Use: High Temperature Thermally Conductive Grease
Manufacturer: Aremco Products, Inc.
707-B Executive Blvd.
Valley Cottage, NY 10989
Telephone: 845-268-0039
Emergency Phone: 845-268-0039 or Infotrac (24/7) 800-535-5053

2. HAZARDS IDENTIFICATION

GHS Classification:

This product has not been classified as hazardous according to the legislation in force.

GHS Label Elements:

None

GHS Signal Word:

None

GHS Hazard Determining Component:

None

GHS Hazard Statements for Health Hazards:

None

GHS Precautionary Statements - Prevention:

None

GHS Precautionary Statements - Response:

None

GHS Storage/Disposal:

None

3. COMPOSITION

Chemical Name	CAS No.	EC No.	Concentration	GHS Product Identifier
Silver	7440-22-4	231-131-3	65.0-75.0 %	None
Perfluoroalkylether	60164-51-4	Not Assigned	25.0-35.0%	None

4. FIRST AID MEASURES

Eye Exposure:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention, preferably with an ophthalmologist. If a physician is not immediately available, eye irrigation should be continued for an additional 15 minutes.

Skin Exposure:

Immediately wipe excess material off skin with a dry cloth then wash with plenty of soap and water for at least 5 minutes. See medical attention if irritation develops or persists. Remove contaminated clothing and shoes and clean thoroughly before re-use.

Inhalation:

Remove from immediate source of exposure, assure that victim is breathing, and supply fresh air. If not breathing, administer cardio-pulmonary resuscitation (CPR). If breathing is difficult, administer oxygen if available. Seek medical treatment.

Ingestion:

Do not induce vomiting. If person is conscious, give 1-3 glasses of water to drink. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Do not leave victim unattended. Seek medical treatment.

Medical Conditions Possibly Aggravated by Exposure:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

5. FIRE FIGHTING MEASURES

Flash Point:

Method: Pinsky-Martens Closed Cup – PMCC does not flash.

Extinguishing Media:

This product does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Agents:

None.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved positive pressure breathing apparatus with full face-piece and full chemical resistant protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. In fire conditions, toxic decomposition products (Flourinated compounds) may be formed.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection:

Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots. Use NIOSH approved respirator where mist occurs.

Spill Cleanup:

Absorb with liquid-binding material (sand, diatomite, universal binders, and sawdust). Dispose of contaminated material according to local, state and federal regulations. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.

Environmental Protection:

Inform respective authorities in case product reaches water or sewage system. Do not allow to enter drainage system, surface or ground water.

7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes, skin and clothing. Avoid breathing vapors from overheated material. Keep container closed. Promptly clean residue from closures with dry media. Promptly clean up spills.

Storage:

Store in an area that is cool, dry, well ventilated, away from combustible material, and away from ignition sources. Keep containers closed and well sealed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	CAS No.	EC No.	TLV (mg/m ³)	PEL (mg/m ³)
Silver Flake	7440-22-4	231-131-3	0.1	0.01
Perfluoroalkylether	60164-51-4	Not Assigned	Not Established	Not Established

Engineering Controls:

In the event that the polymer is heated above 350 °C (662 °F), local ventilation should be used to avoid exposure to fumes. Keep containers closed. Safety shower and eyewash fountain should be within direct access.

Respiratory Protection:

If exposure limits are exceeded and local ventilation is unavailable, a supplied-air respirator or a self-contained NIOSH-approved dust and mist respirator is required.

Skin Protection:

Wear body-covering protective clothing and gloves.

Eye Protection:

Wear chemical goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical here represent typical properties of this product. Contact Technical Sales for exact specifications.

Form:	Paste
Color:	Silver
Odor:	None
pH:	Neutral
Specific Gravity, g/cc:	
Water Solubility:	Insoluble

10. STABILITY AND REACTIVITY

Chemical Stability:	This material is stable if handled and stored according to specifications.
Conditions to Avoid:	No decomposition if handled and stored according to specifications.
Hazardous Decomposition Products:	Flourinated compounds. Decomposition temperature is 350 °C

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity:	LD50 Rat > 37,400 mg/kg
Acute Inhalation Toxicity:	Approximate Lethal Concentration / 4 H Rat: > 19.54 mg/l
Acute Dermal Toxicity:	Approximate Lethal Dose / Rabbit: > 17,000 mg/kg Dose > 10.000 mg/kg
Skin Irritation:	Rabbit Classification: Not classified as irritant Result: Slight Irritation
Eye Irritation:	Rabbit Classification: Not classified as irritant Result: Slight irritation
Sensitization:	Human Classification: Not a skin sensitizer Result: Patch test on human volunteers did not demonstrate sensitizations properties. Method: Modified Draize Test
Mutagenicity Assessment:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Carcinogenicity Assessment:	No data available. Not classifiable as a human carcinogen.
Reproduction Assessment:	No data available. No toxicity to reproduction.
Teratogenicity Assessment:	No data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Fish LC50 / 96 H / Oncorhynchus Mykiss (Rainbow Trout): > 1,000 mg/l The substance is a polymer and not expected to produce toxic effects. Aquatic Invertebrates EC50 / 48 H / Daphnia Magna (Water Flea): > 1,000 mg/l
Biodegradability:	This product is not readily biodegradable.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.
Results of PBT & vPvB:	No data available.
Other Adverse Effects:	No data available.

13. DISPOSAL CONSIDERATIONS

Disposal Method: Dispose in accordance with federal, state and local regulations and permits.

14. TRANSPORTATION INFORMATION

DOT UN Status: The material is not a regulated hazardous material for transportation.

15. REGULATORY INFORMATION

U.S. Federal Regulations

CERCLA: No CERCLA reportable quantity has been established for this material.

TSCA: All ingredients of this material are listed on the TSCA inventory.

SARA Title III



Sections 302, 304, 313: This product does not contain any substances reportable under these sections.

Sections 311, 312:

<u>Hazard Classes</u>	<u>Yes/No</u>
Fire Hazard	No
Reactivity Hazard	No
Pressure Hazard	No
Immediate Hazard	No
Delayed Hazard	No

<u>International Inventory</u>	<u>Status</u>
Canada (DSL)	Yes
Europe (EINECS/ELINCS)	Yes
Australia (AICS)	Yes
Japan (MITI)	Yes
South Korea (KECL)	Yes

16. OTHER INFORMATION

NFPA Ratings (scale 0 – 4)	Health, 1 Flammability, 0 Reactivity, 0 Personal Protection, C	
HMIS Ratings (scale 0 – 4)	Health, 1 Flammability, 0 Reactivity, 0 Personal Protection, C	

Key Legend Information

ACGIH	American Conference of Governmental Industrial Hygienists
ARD	International Agency for Research on Cancer
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act
DSL	Domestic Substance List
HMIS	Hazardous Materials Identification System
ND	Not Determined
NE	Not Established
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RTECS	Registry of Toxic Effects of Chemical Substances
SARA	Superfund Amendments & Reauthorization Act
SARA Title III	Emergency Planning & Community Right to Know Act
SARA Section 302	Extremely Hazardous Substances
SARA Section 304	Emergency Release
SARA Section 311	MSDS/List of Chemicals & Hazardous Inventory
SARA Section 312	Emergency & Hazardous Inventory
SARA Section 313	Toxic Chemicals & Release Reporting
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

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