



**CountryMark**

# MATERIAL SAFETY DATA SHEET

## COUNTRYMARK ADVANTAGE HIGH TEMPERATURE GREASE

### 1. PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME	COUNTRYMARK ADVANTAGE HIGH TEMPERATURE GREASE
Product number	GR-2-1, GR-2-2, GR-2-3
PRODUCT USE	Lubricating Grease
MANUFACTURER	Metalcote Division of Chemtool, Inc. 801 West Rockton Rd. Rockton, IL 61072 U.S.A. Tel: +01 815 957 4140 Fax: +01 815 624 0292
EMERGENCY TELEPHONE	INFOTRAC U.S. and Canada - (800) 535-5053 Outside the U.S. and Canada - +01-352-323-3500
*Date of last issue	2010-03-02

### 2. COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS No.	WEIGHT
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	Mixture**(2)	80-90 %
*LITHIUM COMPLEX THICKENER	Proprietary	5-10 %
*MOLYBDENUM SULFIDE (MoS <sub>2</sub> )	1317-33-5	1-5 %
CARBONIC ACID CALCIUM SALT (COMMON NAME: CALCIUM CARBONATE)	471-34-1	3-7 %
*PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	68649-42-3	1-5 %
*ANTIMONY DIALKYL DITHIOCARBAMATE	Proprietary	<0.5 %

\* This chemical(s) is hazardous according to OSHA/WHIMIS criteria

*COMPOSITION COMMENTS	Refer to section eight (8) for exposure limits on ingredients. The identity of chemical ingredients not regulated by U.S. or Canadian Federal or Regional Regulations (e.g. regulations such as OSHA HCS, EPA (TSCA, CAA, RCRA), HC WHMIS and EC CEPA) are treated confidentially and are not disclosed above. **(2) The base oil for this product can be a mixture of any of the following highly refined petroleum streams:
-----------------------	---

CAS 64741-88-4; CAS 64741-89-5; CAS 64741-95-3; CAS 64741-96-4; CAS 64741-97-5; CAS 64742-01-4; CAS 64742-52-5; CAS 64742-53-6; CAS 64742-54-7; CAS 64742-55-8; CAS 64742-56-9; CAS 64742-57-0; CAS 64742-62-7; CAS 64742-63-8; CAS 64742-65-0; CAS 72623-83-7; CAS 72623-85-9; CAS 72623-86-0; CAS 72623-87-1. Carcinogenicity: The petroleum base oils contained in this product have been highly refined by a variety of processes including solvent extraction, solvent dewaxing and hydrotreating to remove aromatics and improve performance characteristics. All petroleum base oils contained in this product meet the IP 346 criteria of less than 3 percent DMSO extractable PAH's and are not considered carcinogens by IARC, NTP or OSHA.

---

### 3. HAZARDS IDENTIFICATION

---

#### EMERGENCY OVERVIEW

Exposure to vapors generated at high temperatures may cause respiratory irritation.

#### SENSITIZATION

No known information.

#### CARCINOGENICITY

IARC: Not listed as a Group 1, 2A, or 2B agent. OSHA: Not regulated. NTP: Not listed.

#### HEALTH WARNINGS

INHALATION. Heating can generate vapors that may cause respiratory irritation, nausea and headaches. Inhalation hazard at room temperature is unlikely due to the low volatility of this product.

SKIN CONTACT. Repeated or prolonged contact can result in drying of the skin.

EYE CONTACT. Slightly irritating.

INGESTION. Can cause stomach ache and vomiting.

Main hazard, if ingested, is aspiration into the lungs and subsequent pneumonitis.

#### ROUTE OF ENTRY

Inhalation. Skin and/or eye contact. Ingestion.

---

### 4. FIRST AID MEASURES

---

#### INHALATION

Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor of hot product, immediately remove from source of exposure. Move the exposed person to fresh air at once. For breathing difficulties oxygen may be necessary. Get medical attention if any discomfort continues.

#### EYES

Rinse the eye with water immediately. Continue to rinse for at least 15 minutes. Contact physician if discomfort continues.

#### SKIN

Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

#### INGESTION

DO NOT INDUCE VOMITING! Get medical attention immediately!

---

### 5. FIRE FIGHTING MEASURES

---

#### FLASH POINT (°C)

> 149 (300°F) Cd OC (Cleveland open cup).

#### FLAMMABILITY LIMIT - LOWER(%)

N/D

#### FLAMMABILITY LIMIT - UPPER(%)

N/D

#### EXTINGUISHING MEDIA

Use: Carbon dioxide (CO<sub>2</sub>). Dry chemicals, sand, dolomite etc. Alcohol resistant foam. Water spray, fog or mist.

---

SPECIAL FIRE FIGHTING PROCEDURES	Use water to keep fire exposed containers cool and disperse vapors. Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.
UNUSUAL FIRE & EXPLOSION HAZARDS	Pressure will increase in over heated, closed containers.
HAZARDOUS COMBUSTION PRODUCTS	Acrid smoke/fumes. Oxides of: Carbon. Phosphorus. Sulfur.
PROTECTIVE MEASURES IN CASE OF FIRE	Self-contained breathing equipment and chemical resistant clothing recommended.

---

## 6. ACCIDENTAL RELEASE MEASURES

---

PERSONAL PRECAUTIONS	Minimize skin contact.
PRECAUTIONS TO PROTECT THE ENVIRONMENT	Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with applicable government regulations.
SPILL CLEAN-UP PROCEDURES	Keep all sources of ignition and hot metal surfaces away from spill. Avoid contact with eyes or skin. Place leaking containers in well ventilated area. If fire potential exists, blanket spill with foam or use water spray to disperse vapors. Contain spill to minimize contaminated area and facilitate salvage or disposal. To clean up spill, flush area sparingly with water or use absorbant material. Avoid discharge to natural water ways.

---

## 7. HANDLING AND STORAGE

---

HANDLING PRECAUTIONS	Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Do not reuse container. Keep lid closed when not in use. Do not store or mix with strong oxidizers. Avoid spilling, skin and eye contact. Eye wash and emergency shower must be available at the work place.
STORAGE PRECAUTIONS	Store separate from strong acids and oxidizers. Keep away from heat, sparks and open flame.
STORAGE CRITERIA	Chemical storage.

---

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

---

COMPONENT	STD	TWA	STEL	TWA	STEL
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	OSHA			5 mg/m3 as oil mist	
LITHIUM COMPLEX THICKENER	OSHA ACGIH	NONE	NONE	NONE	NONE
MOLYBDENUM SULFIDE (MoS <sub>2</sub> )	OSHA ACGIH			N/E	
CARBONIC ACID CALCIUM SALT (COMMON NAME: CALCIUM CARBONATE)	OSHA	3 mg/m3 (resp) as Mo 10 mg/m3 (total)		10 mg/m3 (ihl) as Mo 5 mg/m3 (resp)	
ANTIMONY DIALKYL DITHIOCARBAMATE	OSHA			10 mg/m3 0.5 mg/m3 as Sb	** (e)

ACGIH

0.5 mg/m3 as Sb

\*INGREDIENT COMMENTS  
PROTECTIVE EQUIPMENT

\*\*ACGIH (e): Total dust, containing no asbestos and <1% crystalline silica



ENGINEERING CONTROLS	Use engineering controls to reduce air contamination to permissible exposure level.
VENTILATION	No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.
RESPIRATORS	No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.
PROTECTIVE GLOVES	Chemical resistant gloves recommended to prevent prolonged or repeated contact.
EYE PROTECTION	Use eye protection.
PROTECTIVE CLOTHING	Wear appropriate clothing to prevent repeated or prolonged skin contact.
HYGIENIC WORK PRACTICES	Wash at the end of each work shift and before eating, smoking and using the toilet.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE	Grease.		
COLOR	Grey.		
ODOR	Mild (or faint). Petroleum.		
SOLUBILITY DESCRIPTION	Insoluble in water.		
SOLUBILITY VALUE (g/100g H <sub>2</sub> O 20°C)	< 0.1		
DENSITY	0.90	Temperature (°C)	15.6 (60°F)
VAPOR DENSITY (air=1)	> 5		
VAPOR PRESSURE	< 0.1 mmHg	Temperature (°C)	20 (68°F)
EVAPORATION RATE	< 1	Reference	BuAc=1
pH-VALUE, CONC. SOLUTION	N/A		

## 10. STABILITY AND REACTIVITY

STABILITY	Normally stable.
CONDITIONS TO AVOID	Avoid contact with acids and oxidizing substances.

---

HAZARDOUS POLYMERIZATION	Will not occur.
POLYMERIZATION DESCRIPTION	Not applicable
*HAZARDOUS DECOMPOSITION PRODUCTS	Oxides of: Carbon. Phosphorus. Sulfur.

---

## 11. TOXICOLOGICAL INFORMATION

---

TOXICOLOGICAL INFORMATION No experimental toxicological data on the preparation as such is available.

COMPONENT	LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)
TOXICOLOGICAL DATA	WHMIS (Canada) = Not a controlled product. Carcinogenicity. IP 346 = <3% DMSO Extracts.
TOXIC DOSE - LD 50	> 5000 mg/kg (oral rat)
TOXIC DOSE - LD 50 SKIN	> 2000 mg/kg (skn rbt)
TOXIC CONC. - LC 50	No Information Available (NIA).
IRRITATION	Prolonged skin contact may cause irritation.
SENSITIZATION	Not known to be a sensitizer.

COMPONENT	LITHIUM COMPLEX THICKENER
TOXICOLOGICAL DATA	WHMIS (Canada) = Not a controlled product.
TOXIC DOSE - LD 50	No data available
TOXIC DOSE - LD 50 SKIN	No data available
TOXIC CONC. - LC 50	No data available

COMPONENT	MOLYBDENUM SULFIDE (MoS <sub>2</sub> )
TOXIC DOSE - LD 50	> 2000 mg/kg (oral rat)
TOXIC DOSE - LD 50 SKIN	> 2000 mg/kg (skn rat)
TOXIC CONC. - LC 50	> 2820 ppm/4h (inh-rat)

COMPONENT	CARBONIC ACID CALCIUM SALT (COMMON NAME: CALCIUM CARBONATE)
TOXICOLOGICAL DATA	WHMIS (Canada) Not a Controlled Product
TOXIC DOSE - LD 50	6450 mg/kg (oral rat)
TOXIC CONC. - LC 50	No Information Available (NIA).

COMPONENT	PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS
TOXIC DOSE - LD 50	4739 mg/kg (oral rat)
TOXIC DOSE - LD 50 SKIN	> 2000 mg/kg (skn rbt)

COMPONENT	ANTIMONY DIALKYL DITHIOCARBAMATE
TOXIC DOSE - LD 50	16,400 mg/kg (oral rat)
TOXIC DOSE - LD 50 SKIN	16,000 mg/kg (skn rbt)
TOXIC CONC. - LC 50	100 ppm (inh-rat)

---

## 12. ECOLOGICAL INFORMATION

---

ECOLOGICAL INFORMATION	There is no ecological data on the product itself.
COMPONENT	LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)
COMPONENT	LITHIUM COMPLEX THICKENER
COMPONENT	MOLYBDENUM SULFIDE (MoS2)
COMPONENT	CARBONIC ACID CALCIUM SALT (COMMON NAME: CALCIUM CARBONATE)
ECOTOXICOLOGICAL DATA	WGK nwg
COMPONENT	PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS
ECOTOXICOLOGICAL DATA	WGK 2
LC50, 96 HRS, FISH, mg/l	10 -- 35
EC50, 48 HRS, DAPHNIA, mg/l	1 - 1.5
EC50, 72 HRS, ALGAE, mg/l	No data found.
COMPONENT	ANTIMONY DIALKYL DITHIOCARBAMATE

---

### 13. DISPOSAL CONSIDERATIONS

---

DISPOSAL METHODS	Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.
------------------	---

---

### 14. TRANSPORT INFORMATION

---

DOT HAZARD CLASS	Not regulated.
IDENTIFICATION No.	N/A
REPORTABLE QUANTITY (RQ)	No
U.S. DOT HAZARD LABEL	No DOT label requirement
SEA TRANSPORT NOTES	Not regulated per IMDG.
AIR TRANSPORT NOTES	Not regulated per IATA.

---

### 15. REGULATORY INFORMATION

---

#### US FEDERAL REGULATIONS

COMPONENT	SARA 302	CERCLA	SARA 313
ANTIMONY DIALKYL DITHIOCARBAMATE	No	***	N010 - Sb
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	No	No	No
LITHIUM COMPLEX THICKENER	No	No	No

---

MOLYBDENUM SULFIDE (MoS2)	No	No	No
CARBONIC ACID CALCIUM SALT (COMMON NAME: CALCIUM CARBONATE)	No	No	No
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	No	***	N982 - Zn

REGULATORY STATUS                      \*\*\* Indicates that no RQ is assigned to this generic or broad class, although the class is a CERCLA hazardous substance. See 50 Federal Register 13456 (April 4, 1985). Values in Section 313 column represent Category Codes for reporting under Section 313.

CLEAN AIR ACT

COMPONENT	CAA Accidental Release Prevention
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	No
LITHIUM COMPLEX THICKENER	No
MOLYBDENUM SULFIDE (MoS2)	No
CARBONIC ACID CALCIUM SALT (COMMON NAME: CALCIUM CARBONATE)	No
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	No
ANTIMONY DIALKYL DITHIOCARBAMATE	No

\*SARA HAZARD CATEGORIES              Acute

US STATE REGULATIONS

COMPONENT	CA	MA	FL	MN	NJ	PA	RI
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	No	No	No	No	No	No	No
LITHIUM COMPLEX THICKENER	No	No	No	No	No	No	No
MOLYBDENUM SULFIDE (MoS2)	No	No	Yes	No	No	No	No
CARBONIC ACID CALCIUM SALT (COMMON NAME: CALCIUM CARBONATE)	No	No	No	No	No	No	No
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	No	No	Yes	Yes	Yes	EH	No
ANTIMONY DIALKYL DITHIOCARBAMATE	No	No	No	No	No	No	No

\*STATE REGULATORY STATUS              CALIFORNIA PROPOSITION 65: This product may contain the following chemical(s) considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer or reproductive toxicity, and for which warnings are now required:  
None.

PENNSYLVANIA RIGHT-TO-KNOW: This product contains the following chemicals that the state of Pennsylvania has identified as Special Hazardous Substances (SHS), Environmental Hazards (EH), or both (ESHS). The PA regulations require that the MSDS identify all SHS or EH chemicals by chemical name, common name, and CAS Number if they comprise 0.01% or more.  
Zinc compounds regulated under CERCLA and SARA 313, Environmental Hazard

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

\*    This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

\*CONTROLLED PRODUCT CLASSIFICATION                      Not a controlled product.

GLOBAL INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KORPHLPCHN
-----------	-----	----	----	-----	-----	------------

LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED (IP346 DMSO Extracts <3%)	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
LITHIUM COMPLEX THICKENER	DSL	Yes	EINECS	No	Yes	Yes	No	No
MOLYBDENUM SULFIDE (MoS2)	DSL	Yes	EINECS	Yes	PRTR1	Yes	Yes	Yes
CARBONIC ACID CALCIUM SALT (COMMON NAME: CALCIUM CARBONATE)	DSL	Yes	EINECS	Yes	1-122	Yes	Yes	Yes
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
ANTIMONY DIALKYL DITHIOCARBAMATE	NPRI	Yes	EINECS	Yes	Yes	Yes	Yes	Yes

*USA (TSCA)	All components in this product are listed on the US Toxic Substances Control Act (TSCA) Inventory or are exempt from TSCA Inventory requirements.
*CANADA (DSL)	All components in this product are listed on the Canada Domestic Substances List (DSL) or are exempt from DSL requirements.
*EUROPE (EINECS/ELINCS/NLP)	All components in this product are listed on the European Inventory of New and Existing Chemical Substances (EINECS), the European List of Notified Chemical Substances (ELINCS), or the No Longer Polymers (NLP) list, or are exempt from EU listing requirements.
*JAPAN (ENCS)	This product contains one or more components that are NOT LISTED on the Japan Inventory of Existing and New Chemical Substances (ENCS) and are NOT EXEMPT from ENCS requirements.
*PHILIPPINES (PICCS)	All components in this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or are exempt from PICCS requirements.
*AUSTRALIA (AICS)	All components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or are exempt from AICS requirements.
*KOREA (ECL)	This product contains one or more components that are NOT LISTED on the Korea Existing Chemicals List (ECL) and are NOT EXEMPT from KECL requirements.
*CHINA (IECS)	This product contains one or more components that are NOT LISTED on the China Inventory of Existing Chemical Substances (IECS) and are NOT EXEMPT from IECS requirements.

## 16. OTHER INFORMATION

### NFPA-HMIS HAZARD RATING

HEALTH	Irritation, minor residual injury (1) - HMIS/NFPA
FLAMMABILITY	Burns only if pre-heated (1) - HMIS/NFPA
REACTIVITY	Normally Stable (0) - HMIS/NFPA
PERSONAL PROTECTION INDEX	B - Safety Eyewear and Gloves
*Tariff Code (Schedule B)	2710.19.3750 Lubricating greases, with or without additives.
*REVISION COMMENTS	Section 1: Name Change Section 1: Synonyms Section 1: Manufacturer Section 1: Product Number Section 2: Ingredients Section 2: Percentage Composition Section 2: Composition Comments Section 8: Exposure Limits. Section 11: Toxicological Information Section 12: Ecological Information

Section 15: US Federal Regulations  
Section 15: Clean Air Act  
Section 15: US State Regulations  
Section 15: WHMIS  
Section 15: Inventory Status  
Section 16: Tariff Code (Schedule B)  
Section 16: Disclaimer

\*PREPARED BY Chemtool Regulatory Department

\*Replacement of MSDS generated 2008-05-08

\*DATE 2010-03-02

\*DISCLAIMER While the information and recommendations set forth herein are believed to be accurate as of the date thereof, Chemtool Incorporated makes no warranty with respect thereto and disclaims all liability from reliance therein.

\*INFORMATION SOURCES Raw Material MSDS(s).

\* Information revised since previous MSDS version

PRINTING DATE: 2010-03-02