CHEMTOOL INCORPORATED

MATERIAL SAFETY DATA SHEET
CAT WHITE ASSEMBLY GREASE (AEROSOL)

1. PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME	CAT WHITE ASSEMBLY GREASE (AEROSOL)
Product number	Chemtool, 842050, Caterpillar, 129-1968
PRODUCT USE	Aerosol Lubricating Grease
SUPPLIER	Chemtool Incorporated P.O. Box 538 8200 Ridgefield Road Crystal Lake, IL 60039-0538 USA Tel: (815) 459-1250 Fax: (815) 459-1955
EMERGENCY TELEPHONE	Rocky Mountain Poison Center Denver, Colorado In USA and Canada - (800) 458-5924 Outside USA and Canada - +01-303-893-1322
***Date of last issue**	2007-03-22

2. COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS No.	WEIGHT
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED**(2)	Mixture	30-50 %
*HEPTANE	142-82-5	30-40 %
*PROPANE	74-98-6	10-20 %
*LITHIUM COMPLEX THICKENER	Proprietary	3-7 %
ZINC OXIDE (ZnO)	1314-13-2	<1.15 %
*PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	68649-42-3	<0.75 %
*TITANIUM DIOXIDE (TiO2)	13463-67-7	<0.5 %

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

COMPOSITION COMMENTS

Refer to section eight for exposure limits on ingredients.
Chemical ingredients not regulated by OSHA, SARA, state or federal agencies are treated confidentially.
**(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 64741-96-4; 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. None of the oils used are listed as a carcinogen by NTP, IARC, or OSHA.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Extremely flammable liquid or liquefied gas. Contents under pressure. Irritating to skin. Harmful: may cause lung damage if swallowed.

HEALTH HAZARDS, GENERAL	Harmful: danger of serious damage to health by prolonged exposure through inhalation. Irritating to eyes and skin.
SENSITIZATION	No known information.
***CARCINOGENICITY**	OSHA: Not regulated. NTP: Not listed. IARC: Not listed as a Group 1, 2A, or 2B agent. See Section 11 for carcinogenicity data of ingredients.
HEALTH WARNINGS	INHALATION. The solvent vapors can be harmful and cause headache, nausea and intoxication. SKIN CONTACT. Repeated or prolonged contact can result in drying of the skin. EYE CONTACT. Irritating. INGESTION. Since the quantity in an aerosol can is limited, and the product is hard to ingest, the toxicity risk is deemed to be small.
ROUTE OF ENTRY	Inhalation. Skin and/or eye contact. Ingestion. Skin absorption.

4. FIRST AID MEASURES

INHALATION	Remove victim immediately from source of exposure. Move the exposed person to fresh air at once. For breathing difficulties oxygen may be necessary. If breathing stops, provide artificial respiration. Get medical attention.
EYES	Rinse the eye with water immediately. Continue to rinse for at least 15 minutes. Get medical attention if any 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)	- 104 (-156 F)
FLAMMABILITY LIMIT - LOWER(%)	1.2
FLAMMABILITY LIMIT - UPPER(%)	9.5
EXTINGUISHING MEDIA	Use: Foam. Carbon dioxide (CO_2). Dry chemicals, sand, dolomite etc.
SPECIAL FIRE FIGHTING PROCEDURES	Use water spray to keep fire exposed containers cool and disperse vapors. Water spray may be used to flush spills away from exposures. Vapors from this product may be moved by air currents and ignited by ignition sources.
UNUSUAL FIRE & EXPLOSION HAZARDS	Pressure will increase in over heated, closed containers.
HAZARDOUS COMBUSTION PRODUCTS	Acrid smoke/fumes. Oxides of: Carbon.

PROTECTIVE MEASURES IN CASE OF FIRE Self-contained breathing equipment and chemical resistant clothing recommended.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS Minimize skin contact. Avoid breathing vapors. Wear an appropriate respirator if exposure exceeds recommended guidelines.

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 Contain spill. Neutralize and absorb small amounts. Collect and return large amounts to shipping container. Rinse spill area with water.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS Avoid eye contact. Eye wash station should 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 Flammable compressed gas storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

COMPONENT	STD	TWA	STEL	TWA	STEL
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED**(2)	OSHA			5 mg/m3 (oil mist)	
	ACGIH			5 mg/m3 (oil mist)	10 mg/m3 (oil mist)
HEPTANE	OSHA	500 ppm	N/E	2000 mg/m3	N/E
	ACGIH	400 ppm	500 ppm	1640 mg/m3	2050 mg/m3
	NIOSH	85 ppm	440 ppm (ceil)		
PROPANE	OSHA	1000 ppm			
	ACGIH	1000 ppm	(C1-C4 Alkanes)		
ZINC OXIDE (ZnO)	OSHA	15 mg/m3 (total)		5 mg/m3 (resp)	
	ACGIH			2 mg/m3 (resp)	10 mg/m3 (resp)
TITANIUM DIOXIDE (TiO2)	OSHA			15 mg/m3 (total)	
	ACGIH			10 mg/m3	**A4
	NIOSH	LFC **Ca			

INGREDIENT COMMENTS
**ACGIH A4: Not Classifiable as a Human Carcinogen.
**NIOSH LFC: Lowest Feasible Concentration.
**NIOSH Ca: Potential Occupational Carcinogen.

PROTECTIVE EQUIPMENT

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	Wear splash-proof eye goggles to prevent any possibility of eye contact.
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	Aerosol.		
COLOR	White.		
ODOR	Mild (or faint). Solvent.		
SOLUBILITY DESCRIPTION	Insoluble in water.		
DENSITY	0.77	**Temperature (°C)**	15.6 (60°F)
VAPOR DENSITY (air=1)	> 1		
EVAPORATION RATE	< 1	**Reference**	BuAc=1

10. STABILITY AND REACTIVITY

STABILITY	Normally stable.
CONDITIONS TO AVOID	Avoid contact with acids and oxidizing substances. Avoid heat, flames and other sources of ignition.
HAZARDOUS POLYMERIZATION	Will not occur.
POLYMERIZATION DESCRIPTION	Not applicable
HAZARDOUS DECOMPOSITION PRODUCTS	Oxides of: Carbon.

11. TOXICOLOGICAL INFORMATION

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

COMPONENT	**LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED**(2)**
TOXICOLOGICAL DATA	Carcinogenicity. IP 346 <3%
TOXIC DOSE - LD 50	> 5000 mg/kg (oral rat)
TOXIC DOSE - LD 50 SKIN	> 2000 mg/kg (skn rbt)
TOXIC CONC. - LC 50	N/A.

COMPONENT	**HEPTANE**
TOXICOLOGICAL DATA	Irritating effects. WHMIS (Canada) Skin. D2B - R38
TOXIC DOSE - LD 50	222 mg/kg (ivn-mus)
TOXIC CONC. - LC 50	15900 ppm/-- (inh-mus)
CARCINOGENICITY	OSHA: Not regulated. NTP: Not listed. IARC: Not listed as a Group 1, 2A, or 2B agent. EPA-D designation: Not classifiable as to human carcinogenicity.

COMPONENT	**PROPANE**
TOXIC DOSE - LD 50	1000 mg/kg (oral rat)
TOXIC DOSE - LD 50 SKIN	1800 mg/kg (skn rbt)
TOXIC CONC. - LC 50	No Information Available (NIA).

COMPONENT	**TITANIUM DIOXIDE (TiO2)**
TOXICOLOGICAL DATA	Carcinogenicity. WHMIS (Canada) D2A - R49 www.reptox.csst.qc.ca 8/3/2006
TOXIC DOSE - LD 50	> 10000 mg/kg (oral rat)
TOXIC DOSE - LD 50 SKIN	> 10000 mg/kg (skn rbt)
TOXIC CONC. - LC 50	> 6.8 mg/l/4h (inh-rat)
CARCINOGENICITY	OSHA: Not regulated. NTP: Not listed. IARC-2B: The agent is possibly carcinogenic to humans (limited evidence of carcinogenicity in humans).

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION There is no ecological data on the product itself.

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 PROPER SHIPPING NAME Consumer commodity

DOT HAZARD CLASS ORM-D (Other Regulated Material D).

LABEL FOR TRANSPORT

***TDGR SHIPPING NAME**	Consumer Commodity - bien de consommation
***TDGR CLASS**	N/A.
UN No. SEA	UN1950
IMDG CLASS	2
IMDG PACK GR.	N/A
SEA TRANSPORT NOTES	Aerosols
UN No., AIR	UN1950
ICAO CLASS	2.1
AIR PACK GR.	N/A
AIR TRANSPORT NOTES	Aerosols, flammable

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

COMPONENT	SARA 302	CERCLA	SARA 313
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED**(2)	No	No	No
HEPTANE	No	No	No
PROPANE	No	No	No
LITHIUM COMPLEX THICKENER	No	No	No
ZINC OXIDE (ZnO)	No	***	N982 - Zn
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	No	***	N982 - Zn
TITANIUM DIOXIDE (TiO2)	No	No	No

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
PROPANE	10 000 lbs

SARA HAZARD CATEGORIES Acute Chronic Fire

US STATE REGULATIONS

COMPONENT	CA	MA	FL	MN	NJ	PA	RI

LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED**(2)		Yes	Yes
ZINC OXIDE (ZnO)		Yes	EH
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	Yes	Yes	EH

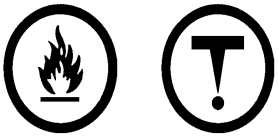
***STATE REGULATORY STATUS**

CALIFORNIA PROPOSITION 65: This product ***DOES NOT*** contain chemicals 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.
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
Antimony compounds regulated under CERCLA and SARA 313, Environmental Hazard <0.15%

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.

LABEL(S) FOR SUPPLY



***CONTROLLED PRODUCT CLASSIFICATION**

B5 - Flammable Aerosols
D2B - Irritating and/or Chronically Toxic Materials

Risk phrases

R-12 Extremely flammable.
R-38 Irritating to skin.
R-65 Harmful: may cause lung damage if swallowed.

GLOBAL INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	PHLP	CHN
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED**(2)	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
HEPTANE	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
PROPANE	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
LITHIUM COMPLEX THICKENER	DSL	Yes	EINECS	Yes	Yes	Yes		Yes
ZINC OXIDE (ZnO)	NPRI	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	NPRI	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
TITANIUM DIOXIDE (TiO2)	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes

COMPONENT	TSCA 12(b) Export Notification
HEPTANE	Yes

TSCA 12(b) NOTICE: This product contains one or more components that require reporting under TSCA Section 12(b) when exported. This product may be subject to US EPA requirements for annual or one-time export notification per country. Contact the Regulatory Compliance Manager for more information.

CANADA CEPA: All components of this product comply with new substance notification requirements under the Canadian Environmental Protection Act (CEPA).

16. OTHER INFORMATION

NFPA-HMIS HAZARD RATING

HEALTH	Irritation, minor residual injury (1) - HMIS/NFPA
FLAMMABILITY	Extremely flammable (4) - HMIS/NFPA
REACTIVITY	Normally Stable (0) - HMIS/NFPA
PERSONAL PROTECTION INDEX	B - Safety Eyewear and Gloves
***REVISION COMMENTS**	Section 3: Carcinogenicity Section 11: Toxicological Information Section 15: Inventory Status
PREPARED BY	James W. Hermann
***Replacement of MSDS generated**	2006-08-29
***DATE**	2007-03-22
DISCLAIMER	While the information and recommendations set forth herein are believed to be accurate as of the date thereof, the company makes no warranty with respect thereto and disclaims all liability from reliance therein.

*** Information revised since previous MSDS version**

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