



MATERIAL SAFETY DATA SHEET

CAT CHAIN AND CABLE LUBRICANT (AEROSOL)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME CAT CHAIN AND CABLE LUBRICANT (AEROSOL)

PART No. Chemtool, 846100, Caterpillar, 1U-8266

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

2. COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS No.	WEIGHT
*METHANE, DICHLORO-	75-09-2	40-50 %
*PROPANE	74-98-6	15-20 %
*BUTANE	106-97-8	10-15 %
DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTHENIC	64742-52-5	5-10 %
*GRAPHITE	7782-42-5	<1 %

* 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.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Extremely flammable liquid or liquefied gas. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. Limited evidence of a carcinogenic effect.

SENSITIZATION

No known information.

HEALTH WARNINGS

GENERAL HEALTH HAZARDS. Inhalation is the main hazard in industrial use. INHALATION. The solvent vapors can be harmful and cause headache, nausea and intoxication. SKIN CONTACT. Irritating. Repeated or prolonged contact can result in drying of the skin. EYE CONTACT. Irritating. INGESTION. Dangerous by ingestion.

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 (-155 F) Estimated.

FLAMMABILITY LIMIT - LOWER(%) 2

FLAMMABILITY LIMIT - UPPER(%) 22

FLAMMABILITY CLASS NFPA 30B: Level 3 Aerosol

EXTINGUISHING MEDIA Use: Foam. Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc.

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. Use special protective clothing. Regular protection may not be safe. Prevent inhalation of fumes and gases.

UNUSUAL FIRE & EXPLOSION HAZARDS Volume and pressure increases strongly when heated. Risk of container explosion in fire.

HAZARDOUS COMBUSTION PRODUCTS Acrid smoke/fumes. Hydrogen chloride (HCl). 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. Remove sources of ignition.
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	Carefully collect spilled material in closed containers and leave for disposal according to local regulations. Provide good ventilation. Use appropriate protective clothing. Rinse area with water. Do not let washing down water contaminate ponds or waterways.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS	Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Containers to be kept tightly closed. Eye wash and emergency shower must be available at the work place.
STORAGE PRECAUTIONS	Keep away from heat, sparks and open flame. Store at temperature below 122°F. Store separated from: Acids. Oxidizing materials.
STORAGE CRITERIA	Flammable liquid storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

COMPONENT	STD	TWA	STEL	TWA	STEL
METHANE, DICHLORO-	OSHA	25 ppm **Ca		125 mg/m3	
	ACGIH	50 ppm **A3		174 mg/m3	
		LFC **Ca			
PROPANE	OSHA	1000 ppm			
	ACGIH	1000 ppm	(C1-C4 Alkanes)		
BUTANE	OSHA	800 ppm			
	ACGIH	800 ppm			
DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTHENIC	OSHA			5 mg/m3 (oil mist)	
	ACGIH			5 mg/m3 (oil mist)	10 mg/m3 (oil mist)
GRAPHITE	OSHA			15 mppcf	
	ACGIH			2 mg/m3 (resp)	except graphite fibers
	NIOSH	2.5 mg/m3 (resp)			

INGREDIENT COMMENTS

**ACGIH A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.
 **NIOSH Ca: Potential Occupational Carcinogen.
 **OSHA Ca: Carcinogen.

PROTECTIVE EQUIPMENT



ENGINEERING CONTROLS	Use engineering controls to reduce air contamination to permissible exposure level.
VENTILATION	Provide adequate general and local exhaust ventilation. All handling to take place in well ventilated area.
RESPIRATORS	Use suitable respiratory protection if ventilation is inadequate. Use air supplied respirator for work in close or poorly ventilated rooms.
PROTECTIVE GLOVES	Chemical resistant gloves required for 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	Black.		
ODOR	Mild (or faint). Solvent.		
SOLUBILITY DESCRIPTION	Slightly soluble in water.		
DENSITY	~ 1.00	Temperature (°C)	15.6 (60°F)
VAPOR DENSITY (air=1)	~ 1.9		
EVAPORATION RATE	> 1.47 (for Methylene Chloride)	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. Avoid heat, flames and other sources of ignition.
HAZARDOUS POLYMERIZATION	Will not polymerize.
HAZARDOUS DECOMPOSITION PRODUCTS	Hydrogen chloride (HCl). Phosgene (COCl ₂). Oxides of: Carbon.

11. TOXICOLOGICAL INFORMATION

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

COMPONENT **METHANE, DICHLORO-**
TOXICOLOGICAL DATA Carcinogenicity. WHMIS (Canada) D2A
Irritating effects. WHMIS (Canada) D1B, D2B
TOXIC DOSE - LD 50 3900 mg/kg (oral rat)
TOXIC CONC. - LC 50 N/A.
CARCINOGENICITY EPA-B2 designation: Probable human carcinogen with sufficient evidence from animal studies. IARC-2B designation: Possibly carcinogenic to humans. NTP-R designation: Reasonably Anticipated to be a Human Carcinogen (RAHC).

COMPONENT **PROPANE**
TOXIC DOSE - LD 50 N/A.
TOXIC CONC. - LC 50 N/A.

COMPONENT **GRAPHITE**
TOXIC DOSE - LD 50 N/A.
TOXIC CONC. - LC 50 N/A.
CARCINOGENICITY OSHA: Not regulated. NTP: Not listed. IARC: Not listed as a Group 1, 2A, or 2B agent.

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION No data on possible environmental effects have been found.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS Dispose of in accordance with Local Authority requirements. Confirm disposal procedures with environmental engineer and local regulations.

14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME Consumer commodity
DOT HAZARD CLASS ORM-D (Other Regulated Material D).
U.S. DOT HAZARD LABEL No DOT label requirement
UN No. SEA UN1950
IMDG CLASS 2.1

SEA TRANSPORT NOTES	Aerosols
UN No., AIR	UN1950
ICAO CLASS	2.1
AIR TRANSPORT NOTES	Aerosols

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

COMPONENT	SARA 302	CERCLA	SARA 313
PROPANE	No	No	No
BUTANE	No	No	No
DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTHENIC	No	No	No
GRAPHITE	No	No	No
METHANE, DICHLORO-	No	1 000 lbs	Yes

See Section 2 for Additional Information

CLEAN AIR ACT

COMPONENT	CAA Accidental Release Prevention
PROPANE	10 000 lbs
BUTANE	10 000 lbs

SARA HAZARD CATEGORIES Acute Chronic Fire

US STATE REGULATIONS

COMPONENT	CA	MA	FL	MN	NJ	PA	RI
METHANE, DICHLORO-	C						
DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTHENIC					Yes	Yes	

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:
Methylene Chloride

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
 D1B - Acute Toxic Material
 D2A - Chronic Very Toxic Material
 D2B - Chronic Toxic Material

Risk phrases

R-12 Extremely flammable.
 R-20/21/22 Also harmful by inhalation, in contact with skin and if swallowed.
 R-36/37/38 Irritating to eyes, respiratory system and skin.
 R-40 Limited evidence of a carcinogenic effect.

GLOBAL INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	PHLP	CHN
METHANE, DICHLORO-	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
PROPANE	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
BUTANE	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
DISTILLATES, PETROLEUM, HYDROTREATED	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
HEAVY NAPHTHENIC								
GRAPHITE	DSL	Yes	EINECS	Yes		Yes	Yes	Yes

16. OTHER INFORMATION

NFPA-HMIS HAZARD RATING

HEALTH Temporary incapacitation, injury (2) - HMIS/NFPA

FLAMMABILITY Extremely flammable (4) - HMIS/NFPA

REACTIVITY Unstable if heated (1) - HMIS/NFPA

PERSONAL PROTECTION INDEX B - Safety Eyewear and Gloves

REVISION COMMENTS Section 2: Ingredients
 Section 11: Toxicological Information
 Section 15: WHMIS

PREPARED BY John Dingess
 James W. Hermann

Replacement MSDS of 2003-11-11

DATE 2006-03-29

PRINTING DATE: 2006-03-29

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