



MATERIAL SAFETY DATA SHEET

CAT COOLANT SOLUTION A

1. PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME	CAT COOLANT SOLUTION A
PART No.	Chemtool, 842140, Caterpillar, 1U-6863, 8T-5296 Kit
SYNONYMS	CAT COOLANT CONDITIONER TEST KIT, L6491, NITRITE TEST SOLUTION A
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	N2006-08-30

2. COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS No.	WEIGHT
WATER	7732-18-5	80-90 %
*SULFURIC ACID	7664-93-9	5-10 %
*CERATE(2-), HEXAKIS (NITRATO-O)-, DIAMMONIUM, (OC-6-11)-	16774-21-3	5-10 %

* 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.
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3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Causes burns. Harmful if swallowed.

SENSITIZATION	No known information.
CARCINOGENICITY	IARC: Not listed as a Group 1, 2A, or 2B agent. NTP: Not listed. OSHA: Not regulated.
TERATOGENICITY	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.
HEALTH WARNINGS	INHALATION. Spray mist can irritate airways and lungs. Inhalation of product vapor or mist may cause irritation of mucous membranes in nasal passages and throat. SKIN CONTACT. Severly irritating by prolonged or repeated exposure. INGESTION. Can cause stomach ache and vomiting. Can cause corrosive burns on mucous membranes, throat and stomach. EYE CONTACT. Corrosive. Strong local irritant which can cause corrosive burns. Repeated or prolonged exposure can cause hypersensitivity and eczema.
ROUTE OF ENTRY	Inhalation. Ingestion. Skin and/or eye contact.
MEDICAL SYMPTOMS	Severe skin irritation.

4. FIRST AID MEASURES

INHALATION	Remove victim immediately from source of exposure. Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Get medical attention.
EYES	Immediately rinse with water. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.
SKIN	Wash skin thoroughly with soap and water. Continue to rinse for at least 15 minutes. Remove contaminated clothing. Contact physician if irritation persists.
INGESTION	DO NOT INDUCE VOMITING! Drink large amounts of water. Get medical attention immediately! Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

FLASH POINT (°C)	N/A
FLAMMABILITY LIMIT - LOWER(%)	N/A
FLAMMABILITY LIMIT - UPPER(%)	N/A
EXTINGUISHING MEDIA	This material is not combustible.
SPECIAL FIRE FIGHTING PROCEDURES	Use water spray to keep fire exposed containers cool and disperse vapors.
UNUSUAL FIRE & EXPLOSION HAZARDS	No unusual fire or explosion hazards noted.
HAZARDOUS COMBUSTION PRODUCTS	***No specific hazardous combustion products noted.***
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. While cleaning up spills also refer to the section Protective measures.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS	Avoid spilling, skin and eye contact. 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. Product contains nitrites, DO NOT mix with amines.
STORAGE PRECAUTIONS	Store separated from: Bases. Reducing materials. Do not heat concentrate over 140 F. Do not freeze.
STORAGE CRITERIA	Corrosive storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

COMPONENT	STD	TWA	STEL	TWA	STEL
SULFURIC ACID	OSHA			1 mg/m ³	
	ACGIH			0.2 mg/m ³ (thoracic)	
	MAK.	0.1 mg/m ³ (inhal)	C 0.2 mg/m ³		

INGREDIENT COMMENTS MAK = German Exposure Limits.

PROTECTIVE EQUIPMENT



ENGINEERING CONTROLS	Use engineering controls to reduce air contamination to permissible exposure level.
VENTILATION	Provide adequate general and local exhaust ventilation.
RESPIRATORS	Respiratory protection must be used if air concentration exceeds acceptable level.
PROTECTIVE GLOVES	Chemical resistant gloves required for prolonged or repeated contact. Use protective gloves made of: Neoprene.

EYE PROTECTION	Wear splash-proof eye goggles to prevent any possibility of eye contact.
PROTECTIVE CLOTHING	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor 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	Liquid.		
COLOR	Yellow.		
ODOR	No characteristic odor.		
PHYSICAL DATA COMMENTS	Information given concerns the concentrated solution.		
DENSITY	~ 1.0	Temperature (°C)	15.6 (60°F)
EVAPORATION RATE	< 1.00	Reference	EtEt=1
pH-VALUE, CONC. SOLUTION	1.0		

10. STABILITY AND REACTIVITY

STABILITY	Normally stable.
CONDITIONS TO AVOID	Oxidizing, avoid contact with reducing agents. Reacts with alkalis and amines and generates heat.
HAZARDOUS POLYMERIZATION	Will not occur.
POLYMERIZATION DESCRIPTION	Not applicable
HAZARDOUS DECOMPOSITION PRODUCTS	Oxides of: Sulfur.

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION	No experimental toxicological data on the preparation as such is available.
COMPONENT	SULFURIC ACID
TOXICOLOGICAL DATA	Acute toxicity. LC50. 2 hours. Inhalation. Rat. 510 mg/m ³ Acute toxicity. LC50. 4 hours. Inhalation. Mouse. 160 mg/m ³ Acute toxicity. WHMIS (Canada) Inhalation. D1A >31.5%, D1B <31.5% R23/25
TOXIC DOSE - LD 50	2140.00 mg/kg (oral rat)
COMPONENT	CERATE(2-), HEXAKIS (NITRATO-O)-, DIAMMONIUM, (OC-6-11)-
TOXICOLOGICAL DATA	Corrosive effects. WHMIS (Canada) C - Oxidizing Material
TOXIC DOSE - LD 50	N/A.
TOXIC CONC. - LC 50	N/A.

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.

WASTE CLASSIFICATION D002 Corrosive

14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME Sulfuric acid with not more than 51% acid

DOT HAZARD CLASS 8

IDENTIFICATION No. UN2796

PACKING GROUP II

LABEL FOR TRANSPORT



TDGR SHIPPING NAME Sulfuric acid with not more than 51% acid

TDGR PACKING GROUP II

UN No. SEA UN2796

IMDG CLASS 8

IMDG PACK GR. II

SEA TRANSPORT NOTES Sulfuric acid with not more than 51% acid

UN No., AIR UN2796

ICAO CLASS 8

AIR PACK GR. II

AIR TRANSPORT NOTES Sulphuric acid with 51% or less acid

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

COMPONENT	SARA 302	CERCLA	SARA 313
CERATE(2-), HEXAKIS (NITRATO-O)-, DIAMMONIUM, (OC-6-11)- SULFURIC ACID	No 1 000 lbs	No 1 000 lbs	No Yes

See Section 2 for Additional Information

CLEAN AIR ACT

SARA HAZARD CATEGORIES Acute Chronic

US STATE REGULATIONS

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.

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 E - Corrosive Material
D2A - Chronic Very Toxic Material

Risk phrases R-34 Causes burns.
R-22 Harmful if swallowed.

GLOBAL INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	PLHP	CHN
SULFURIC ACID	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
CERATE(2-), HEXAKIS (NITRATO-O)-, DIAMMONIUM, (OC-6-11)-	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes

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	Extremely hazardous,serious injury(3) - HMIS/NFPA
FLAMMABILITY	Will not burn (0) - HMIS/NFPA
REACTIVITY	Normally Stable (0) - HMIS/NFPA
PERSONAL PROTECTION INDEX	B - Safety Eyewear and Gloves
REVISION COMMENTS	Section 2: Ingredients Section 3: Health Hazards Section 14: DOT regulations Section 15: WHMIS
PREPARED BY	John Dingess James W. Hermann
Replacement of MSDS generated	2003-11-11
DATE	N2006-08-30
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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