



# Material Safety Data Sheet



Abbreviations used on this Material Safety Data Sheet:

n/av. = not available

n/ap. = not applicable

ppm = parts per million

TLV= Threshold Limit Value

NFPA Hazard Rating: 4 = Extreme

3 = High

2 = Moderate

1 = Slight

0 = None

X - blank

WHMIS HAZARD:

B-3, D-IB

NFPA HAZARD RATING:

HEALTH - 2, FLAMMABILITY - 2, REACTIVITY - 0

## SECTION 1 – PRODUCT IDENTIFICATION

Supplier	Saskatoon Diesel Services Ltd
Address	230-29 <sup>th</sup> Street East Saskatoon SK Canada S7L 6Y6
Product Trade Name	Eco-Tek
CAS Number	Confidential
Synonyms	None.
Generic/Chemical Name	Confidential.
Product Use	Miscellaneous fuel additive.
Preparation/Revision Date	September 2007
Transportation Emergency Phone No.	IN CASE OF A DANGEROUS GOODS EMERGENCY CALL CANUTEC AT THE 24-HOUR NUMBER 613-996-6666

## SECTION 2 - COMPOSITION

HAZARDOUS INGREDIENTS	CONCENTRATION	CAS NUMBER	LETHAL DOSE (50%) OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LETHAL CONCENTRATION (50%) OF INGREDIENT (SPECIFY SPECIES AND ROUTE)
Disodium ethylenebis (dithiocarbamate) (Nabam)	15	142-59-6	395 mg/kg (rat, oral)	n/av
Sodium dimethyldithiocarbamate	15	128-04-1	n/av	n/av
Ethylene thiourea	<1	96-45-7	n/av	n/av
ethylenediamine	<0.75	107-15-3	500 mg/kg (rat, oral)	300 mg/m <sup>3</sup> (mouse, inhalation)
dimethylamine	<0.75	124-40-3	698 mg/kg (rat, oral)	4700 ppm/4hour (rat, inhalation)

## SECTION 3 – PHYSICAL DATA

PHYSICAL STATE	Liquid	ODOR AND APPEARANCE	Yellow-green solution with sulfur odor.	ODOR THRESHOLD	n/av
VAPOR PRESSURE	n/av	VAPOR DENSITY	<1	EVAPORATION RATE	approximately 1
				BOILING POINT	>100C
pH	10.5 to 12.4	SPECIFIC GRAVITY	1.176@20c	COEFFICIENT OF MATERIAL DISTRIBUTION	totally soluble in water
				FREEZING POINT	0 c

## SECTION 4 – FIRE AND EXPLOSION DATA

FLAMMABILITY IF YES, UNDER WHICH CONDITIONS?		
YES	<input type="checkbox"/>	NO <input checked="" type="checkbox"/>
METHOD OF EXTINCTION	Use means applicable to surrounding fire, such as carbon dioxide, dry chemical powder, foam, or water spray.	
SPECIAL PROCEDURES	Fire fighters must wear self contained breathing apparatus and full protective gear. Extreme heat may result in release of toxic gases.	
FLASHPOINT AND METHOD	n/ap	UPPER FLAMMABILITY LIMIT n/ap
		LOWER FLAMMABILITY LIMIT (% BY VOLUME) n/ap
AUTOIGNITION TEMPERATURE	n/av	HAZARDOUS COMBUSTION PRODUCTS Oxides of carbon, nitrogen and sulfur.
EXPLOSION DATA SENSITIVITY TO IMPACT	Not sensitive to impact.	
	SENSITIVITY TO STATIC DISCHARGE Not sensitive to static charge.	

## SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY. IF NO, UNDER WHICH CONDITIONS?	
YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/>
Normally stable to moderate heat, sunlight and air.	
INCOMPATIBILITY WITH OTHER SURFACES. IF YES, WHICH ONES?	
YES	<input checked="" type="checkbox"/> NO <input type="checkbox"/>
Avoid contact with mineral acids such as nitric, sulfuric, or hydrochloric acid.	
FLAMMABILITY IF YES, UNDER WHICH CONDITIONS?	
Acidification can release flammable gases. Thermal decomposition may release gases such as amines and carbon disulfide.	
HAZARDOUS DECOMPOSITION PRODUCTS	
Oxides of carbon, nitrogen and sulfur. Amines. Carbon disulfide.	

PRODUCT IDENTIFIER Eco-Tek			
<b>SECTION 6 – TOXICOLOGICAL PROPERTIES</b>			
ROUTE OF ENTRY			
SKIN CONTACT	<input checked="" type="checkbox"/>	SKIN ABSORPTIONS	<input checked="" type="checkbox"/>
EYE CONTACT	<input checked="" type="checkbox"/>	INHALATION	<input checked="" type="checkbox"/>
INGESTION			
<input checked="" type="checkbox"/>			
EFFECTS OF ACUTE EXPOSURE TO PRODUCT			
Causes eye and skin irritation. Vapors may be irritating to the nose, throat and respiratory tract. Symptoms of overexposure can include headache, drowsiness, dizziness, nausea, loss of coordination, and fatigue. Toxic - may be harmful if swallowed.			
EFFECTS OF CHRONIC EXPOSURE TO PRODUCT			
Prolonged or repeated skin contact can cause dermatitis. Sensitized persons may experience dermatitis after single exposure. Prolonged or repeated inhalation may cause headaches, irritability, and depression. Sensitized persons may experience symptoms of cold, flu, mild hay fever or bronchial asthma.			
EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
ACGIH TLV-TWA=5 ppm for Dimethylamine. ACGIH-TLV=10 ppm for ethylenediamine. OSHA PEL 8-hrTWA =10ppm for ethylenediamine and dimethylamine.	Eye, skin and respiratory tract.	May cause skin sensitization reactions in some people.	Ethylene thiourea has been identified as a carcinogen by NTP and IARC and is known to the State of California to cause cancer.
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS
Ethylenethiourea has caused birth defects in laboratory animals.	Ethylene thiourea, carbon disulfide, disodium ethylenebisdithiocarbamate, and sodium dimethyldithiocarbamate are known to the State of California to cause birth defects or other reproductive harm.	Not identified.	None identified.
<b>SECTION 7 - PREVENTIVE MEASURES</b>			
PERSONAL PROTECTIVE EQUIPMENT:			
GLOVES (SPECIFY)	RESPIRATOR (SPECIFY)	EYE (SPECIFY)	
Chemical resistant. Rubber is recommended.	None required where adequate ventilation exists. If airborne concentration is high, use HIOSH-approved Supplied Air Respirator (SAR) or Self Contained Breathing Apparatus (SCBA).	Use safety glasses with side shields. For splash protection use chemical goggles and face shield.	
FOOTWEAR (SPECIFY)	CLOTHING (SPECIFY)	OTHER (SPECIFY)	
Impervious boots.	Chemical resistant apron or coveralls.		
ENGINEERING CONTROLS (SPECIFY VENTILATION, ENCLOSED PROCESS)			
Use of combination of local exhaust and dilution ventilation to keep exposure as low as possible.			
LEAK AND SPILL PROCEDURE			
Wear appropriate personal protective equipment. Contain spill with dikes and absorbent materials. Collect in suitable closed container. The spill area may be very slippery. Do not discharge spilled material into surface water bodies and ground water.			
WASTE DISPOSAL			
Follow all local, provincial, and national regulations.			
HANDLING PROCEDURES AND EQUIPMENT			
Read and follow all label directions carefully. Wear appropriate personal protective equipment. Follow normal hygienic practices for handling chemicals. It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.			
STORAGE REQUIREMENTS			
Store in a cool, dry place away from all incompatible materials. Keep container tightly closed when not in use. Keep away from children.			
SPECIAL SHIPPING INFORMATION		TDG. UN NUMBER	
Consumer Commodity exemption may apply. See TDG Regulations.		n/ap	
<b>SECTION 8 – FIRST AID MEASURES</b>			
SPECIFIC MEASURES			
SKIN CONTACT: Remove contaminated clothing. Wash thoroughly with soap and water for 15 minutes. Launder clothing before reuse. Seek medical attention if irritation occurs.			
EYE CONTACT: Flush eyes with running water for 20 minutes while retracting eyelids. If irritation or adverse symptoms develop, seek medical attention.			
INGESTION: Do not induce vomiting. If victim is conscious, have them drink copious amounts of water to dilute ingested material. Never give anything by mouth to an unconscious or convulsing person. Seek medical attention immediately.			
INHALATION: Remove victim to fresh air. Use artificial respiration if victim has stopped breathing. Seek immediate medical attention.			
<b>SECTION 9 – PREPARATION DATE OF MSDS</b>			
PREPARED BY	PHONE NUMBER- EMERGENCY	DATE	
MSDS Coordinator	DSG Canada 1-306-242-7644 ext 7228 1-800-667-6879	IN CASE OF A DANGEROUS GOODS EMERGENCY CALL CANUTEC AT THE 24-HOUR NUMBER 613-996-6666	Revised September 2007