Anchem Sales
120 Stronach Cres., London, ON, N5V 3A1 Canada

PRODUCT NAME: Ancool 40 Swimming Pool Antifreeze AN100-40

SECTION 01: PRODUCT INFORMATION AND COMPANY INFORMATION

MANUFACTURER:	Same as above		
PREPARED BY:	Production Department		
VERSION DATE:	01-Jul-15		
TELEPHONE NO.:	(519) 451-1614		
EMERGENCY PHONE NO.:	(613) 996-6666		
CHEMICAL FAMILY	Alcohols/Esters/Alkaloi	**CHEMICAL FORMULA**	Not Available
MOLECULAR WEIGHT	Not Available	**MATERIAL USE:**	Heat transfer fluid for ground source heating systems.
SYNONYMS:	Denatured Ethyl Alcohol		

SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

SECTION 03: HAZARD IDENTIFICATION

ROUTE OF ENTRY

Eyes: Causes severe eye irritation. May cause slight, reversible conjunctivitis.

Skin: Potentially harmful amounts of material may be absorbed across markedly abraded skin when contact is sustained.

Inhalation High vapour concentrations may cause a burning sensation in the throat and nose, and stinging and watering of the eyes.

Ingestion: May cause dizziness, faintness, drowsiness, decreased awareness and responsiveness, euphoria, abdominal discomfort, nausea, vomiting, staggering gait, lack of coordination, and coma.

SECTION 04: FIRSTAID

Skin Contact: Flush with copious amounts of water for at least 15 minutes. If irritation persists or signs of toxicity occur, seek medical attention. Remove contaminated clothing and launder before reuse.

Eye Contact: Flush eyes with gently flowing water for at least 15 minutes or until the chemical is removed, while holding the eyelid(s) open. Take care not to rinse the contaminated water into the unaffected eye or face. Seek immediate medical attention.

Inhalation, Acute

If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, get medical attention. If the affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. In situations where administering oxygen is appropriate, first aiders must be trained in the safe use and handling of oxygen. It is preferable to administer oxygen under a doctor's supervision or advice. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation (CPR) immediately. Immediate medical assistance is required.

Ingestion: Seek immediate medical attention. Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Administer artificial respiration if breathing has stopped. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation (CPR) immediately.

Notes to physician: Symptoms vary with the levels of ethanol in the blood. Mild alcohol intoxication occurs at blood levels between 0.05%-0.15% and approximately 25% of individuals will show signs of intoxication at these levels. Above 0.15% the person is definitely under the influence of ethanol and 50% - 95% of individuals at this level are clinically intoxicated. Severe poisoning occurs when the blood ethanol level is 0.3% - 0.5%. Above 0.5% the individual will be comatose and death can occur. The unabsorbed ethanol should be removed by gastric lavage after intubating the patient to prevent

aspiration. Avoid the use of depressant drugs or the excessive administration of fluids.

SECTION 05: FIRE EXPLOSION HAZARD AND FIRE FIGHTING MEASURES

FLAMMABLE?	Yes
IF YES, UNDER WHICH CONDITIONS?	
FLASH POINT (TCC) (C):	16
FLAMMABLE LIMITS:	**LEL(% BY VOL.):** 3.3 **UEL(% BY VOL):** 19.0
AUTO IGNITION TEMPERATURE (C)	422
EXTINGUISHING MEDIA	Use carbon dioxide or dry chemical media for small fires. Apply alcohol-type or all-purpose-type foams by manufacturers' recommended techniques for large fires. Water is generally unsuitable and may help spread the fire.
SPECIAL PROCEDURES:	Use water spray to cool fire-exposed containers and structures. Use water spray to disperse vapors; re-ignition is possible. Vapors from this product and may travel or be moved by air currents and ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from product handling point.
HAZARDOUS COMBUSTION PRODUCTS:	Oxides of carbon.
UNUSUAL FIRE AND EXPLOSION HAZARDS	Vapours form from this product and may travel or be moved by air currents and ignited by pilot lights, other flames, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from handling point.
SENSITIVITY TO STATIC DISCHARGE	Not Available
SENSITIVITY TO MECHANICAL IMPACT:	Not Available

SECTION 06: ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedure: Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed. Consult local authorities.

Procedure for Clean Up: Flammable liquid. Isolate hazard area and restrict access. Stop leak only if safe to do so. Remove ignition sources and work with non-sparking tools. Small spills: soak up with absorbent material and scoop into containers. Large spills : prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

SECTION 07: HANDLING AND STORAGE

Handling Procedures and Storage Requirements

Handling: Flammable. For industrial use only. Handle and open containers with care. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid inhalation of chemical. DO NOT handle or store near an open flame, heat, or other sources of ignition. Fixed equipment as well as transfer containers and equipment should be grounded to prevent accumulation of static charge. DO NOT pressurize, cut, heat, or weld containers. Empty containers may contain hazardous product residues. Keep the containers closed when not in use. Protect against physical damage. Use appropriate personnel protective equipment.
Storage: Store in a cool, dry, well ventilated area, away from heat and ignition sources. Place away from incompatible materials. Store in accordance with good industrial practices.

SECTION 08: PERSONAL PROTECTIVE EQUIPMENT / EXPOSURE CONTROLS

GLOVES/TYPE:	Neoprene gloves. Butyl rubber gloves. Skin Protection: Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.
RESPIRATOR/TYPE:	Up to 1000 ppm, an approved organic vapour cartridge respirator can be used. For concentrations above 1000 ppm, an air-supplying respirator is recommended. The user should consult a respirator guide, such as the Canadiand Standards Association's guide Z94.4- M1982.
EYE/TYPE:	Chemical goggles; also wear a face shield if splashing hazard exists.
OTHER/TYPE:	Ensure that eyewash stations and safety showers are proximal to the work-station location.
ENGINEERING CONTROL	Electrical and mechanical equipment should be explosion proof. Use local ventilation at product handling and transfer points.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIE

PHYSICAL STATE/APPEARANCE:	Liquid (Blue)		
ODOUR:	Alcohol	**ODOUR THRESHOLD:**	0.1-5100
VAPOUR PRESSURE (mm Hg @ 20C):	5.7	**VAPOUR DENSITY (Air=1):**	1.59
EVAPORATION RATE (Ether = 1):	1.7	**SPECIFIC GRAVITY:**	0.811
BOILING POINT (C):	78.5	**FREEZING POINT (C)**	-114.1
Ph (% SOLUTION):	N. App.	**% VOLATILE (WT):**	93.7
SOLUBILITY IN WATER (% W/W)	100%		

SECTION 10: STABILITY AND REACTIVITY

CHEMICALLY STABLE? Yes

IF NO, UNDER WHICH CONDITIONS? Avoid excessive heat, open flames and all ignition sources.

INCOMPATIBILITY WITH OTHER SUBTANCES Yes

IF YES, WITH WHICH ONES: Oxidizing materials

SPECIAL REACTIVITY AND UNDER WHAT CONDITIONS None currently known.

HAZARDOUS DECOMPOSITION PRODUCTS: Burning can produce carbon monoxide and/or carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL	1000ppm (TLV)
LC 50 OF MATERIAL, SPECIES AND ROUTE	31 823 ppm (Rat-4hrs)
LD 50 OF MATERIAL, SPECIES AND ROUTE	7000 mg/kg (Rabbit/Oral)
CARCINOGENICITY OF MATERIAL	N. Av.
REPRODUCTIVE EFFECTS:	N. Av.
IRRITANCY OF MATERIAL	N. Av.
SENSITIZING CAPABILITY OF MATERIAL	N. Av.
SYNERGISTIC MATERIALS	N. Av.

SECTION 12: ECOLOGICAL INFORMATION

AQUATIC TOXICITY Ethanol - LC50 (Oncorhynchus mykiss) 12900 mg/L LC50 (Pimephales promelas) 14.2 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.
Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION 14: TRANSPORT INFORMATION

TDG CLASSIFICATION Class 3, ALCOHOL N.O.S. (Ethyl Alcohol)

UN NUMBER: 1987

PACKING GROUP: II

Special Provisions for Transport

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION B-2, D-2A

Flammable liquid with a flash point lower than 37.8C. Material causing other toxic effects (TOXIC).

SECTION 16: OTHER INFORMATION

ABBREVIATIONS USED: N.Av. = Not Available
N.App. / N.Ap. = Not Applicable

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SOURCES: Supplier MSDS

For updated copies of an MSDS, please contact Anchem Sales at the address/phone number on Page 1 or fax the MSDS Co-ordinator at (519) 451-4593.

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