

CHAMPION  
INDUSTRIAL HYGIENE, TOXICOLOGY, AND MATERIAL  
SAFETY DATA SHEET

DEC 27 1990

Note: No Representation is made as to the accuracy of the information herein. See page 7 for conditions under which data are furnished.

Trade Name: Champion Anti-Freeze Coolant  
Manufacturer's Name: Champion Packaging, Inc.  
Emergency Telephone Number: (914) 831-3400 ext. 204  
Address: 1101 Lombard Road, Lombard, IL 60148  
Chemical Name and/or Family or Description: Antifreeze  
THIS PRODUCT IS CLASSIFIED AS:  
\_\_\_\_\_ Carcinogenic by OSHA, IARC, or NTP  X  Not Carcinogenic

**WARNING STATEMENT:**  
WARNING!!! HARMFUL OR FATAL IF SWALLOWED  
KEEP OUT OF REACH OF CHILDREN  
MAY CAUSE IRRITATION TO EYES

**OCCUPATIONAL CONTROL PROCEDURES**

**Protective Equipment (Type)**

**Eyes:** Chemical type goggles or face shield optional.

**Skin:** Exposed employees should exercise reasonable personal cleanliness; this includes cleansing exposed skin areas several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.

**Inhalation:** Supplied air positive-pressure full-facepiece respirators in emergencies, cleaning spills, entry into tanks, confined spaces.

**Ventilation:** Adequate to meet component permissible concentrations.

**Permissible Concentrations:**

**Air:** None established for product; see p. 4 for component permissible concentrations; for ethylene glycol; 50ppm ceiling (ACGIH 1986-87)

**EMERGENCY AND FIRST AID PROCEDURES**

**Eyes:** Flush with water for 15 minutes.

**Skin:** Wash exposed areas with soap and water.

**Ingestion:** Give large quantities of water, then induce vomiting immediately. Get immediate medical attention. Do not make and unconscious person vomit. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air; if not breathing apply artificial respiration. Get medical attention. Keep affected person warm and at rest.

**Other Instructions:** None.

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PHYSIOLOGICAL EFFECTS:

Code No. 02055

Effects of Exposure

Acute:

Eyes: Believed to cause slight eye irritation.

Skin: Believed to be slightly irritation upon prolonged contact.

Respiratory System: Drowsiness, narcosis, and unconsciousness possible upon exposure to high concentrations in poorly ventilated confined spaces.

Chronic: Liver and kidney damage in 2 year rat feeding study using 1-2% ethylene glycol. Oral administration of very high doses of ethylene glycol produced birth defects in laboratory animals.

Other: See additional Comments p. 6.

Sensitization Properties: Skin: Unknown  
Respiratory: Unknown

Median Lethal Dose (LD 50 LC 50) (Species)

Oral Animal data does not reflect human toxicity; See Add'l Cmmt P.6

Inhalation N.D.

Dermal Believed to be greater than 3 g/kg (rabbit); practically non-toxic

Other N.D.

Irritation Index, Estimation of Irritation (Species)

Skin Believed to be 0.5-1.0/8.0 (rabbit); slightly irritating

Eyes Believed to be 15-25/110 (rabbit); slightly irritating

Symptoms of Exposure See above and Additional Comments p. 6

FIRE PROTECTION INFORMATION

Ignition Temp. °F. N.D. Flash Point °F. (Method) 240 F (COC)

Flammable Limits (%) Lower 3.2 Upper N.D.

Products Evolved When Subjected to Heat or Combustion:

Carbon monoxide and carbon dioxide may be formed on burning in limited air supply.

Recommended Fire Extinguishing Agents and Special Procedures:

According to the National Fire Protection Association Guide, use water spray, dry chemical, foam, or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop the leak.

Unusual or Explosive Hazards:

None.

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**ENVIRONMENTAL PROTECTION**

Code No. 02055

Waste Disposal Method: Under RCRA, it is the responsibility of the user of products to determine, at the time of disposal, whether product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixture, processes, etc. may render the resulting material hazardous. (See Remarks for Waste Classification.)

Procedures in Case of Breakage or Leakage:  
(Transportation Spills Call CHEMTREC (800) 424-9300)  
Avoid Contact with eyes. Contain spill if possible. Wipe up or absorb on suitable material and shovel up.

Remarks: Waste Classification: Product has been evaluated for RCRA characteristics and does not meet criteria of a hazardous waste if discarded in its purchased form.

**PRECAUTIONS**

**WARNING! HARMFUL OR FATAL IF SWALLOWED  
KEEP OUT OF REACH OF CHILDREN  
MAY CAUSE IRRITATION TO EYES**

Do not drink antifreeze or solution.  
Avoid contact with eyes.  
Wash thoroughly after handling.  
Do not store in open or unlabeled containers.  
ETHYLENE GLYCOL BASE.  
Ethylene glycol has produced birth defects in rodents.

Requirements for Transportation, Handling and Storage: Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

DOT Proper Shipping Name: N.A.  
DOT Hazard Class (if applicable): N.A.

**CHEMICAL AND PHYSICAL PROPERTIES**

Boiling Point (°F): 388 Vapor Pressure: Less Than 0.1 (mmHg)

Specific Gravity: 1.13 (H<sub>2</sub>O=1) Vapor Density: 2.14 (Air=1)

Appearance and Odor: Fluorescent green liquid; mild odor.

pH of undiluted product: 10.8 Solubility: Sol.

Percent Volatile by Volume: nil. Evaporation: Less than 1

Viscosity: 10 cP @ 20 C

Hazardous Polymerizations: Do Not Occur

The Material Reacts Violently With: Strong Oxidizers  
(See page 6 for further details)

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## COMPOSITION

Code No. 02055

<u>Chemical/Common Name</u>	<u>CAS No.</u>	<u>Exposure Limit</u>	<u>Range in %</u>
*1,2-ethanediol	107211	50 ppm Ceiling-ACGIH 50ppm Ceiling-OSHA	95.00 - 99.99
*Borax	1303964	1mg/m3 TWA ACGIH 10mg/m3 TWA OSHA	1.00 - 3.99

\*Hazardous according to OSHA (1910.1200) or one or more state Right-To-Know lists.

## SARA TITLE III

I. Title III Section 302/304 Extremely Hazardous Substance

Component	CAS No.	%	RQ (lbs)	TPQ (lbs)
NONE				

II. CERCLA Section 102(a) Hazardous Substance

Component	CAS No.	%	RQ (lbs)
Trisodium orthophosphate	10101890	0.1-0.99	5000

III. Title III Section 311 Hazard Categorization

Acute	Chronic	Fire	Pressure	Reactive	Not Applicable
X	X				

IV. Title III Section 313 Toxic Chemicals

Component	CAS No.	%
1,2-Ethanediol	107211	95-99.99

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PRODUCT SHIPPING LABEL

Code No. 02055

CHAMPION ANTI-FREEZE COOLANT

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MAY CAUSE IRRITATION TO EYES**

Do not drink antifreeze or solution.  
Avoid contact with eyes.  
Wash thoroughly after handling.  
Do not store in open or unlabeled containers.  
ETHYLENE GLYCOL BASE.  
Ethylene glycol has produced birth defects in rodents.

If swallowed, INDUCE vomiting immediately.  
Call a doctor. In case of contact flush eyes with  
plenty of water for at least fifteen minutes.  
NEVER give anything by mouth to an unconscious person.

<u>Chemical/Common Name</u>	<u>CAS No.</u>	<u>Range in %</u>
*1,2-ethanediol	107211	95.00 - 99.99
*Borax	1303964	1.00 - 3.99

\*Hazardous according to OSHA (1910.1200) or one or more state  
Right-To-Know lists. Not classified as a hazardous material  
by DOT definition.

HMIS  
Health: 1      Reactivity: 0  
Flammability: 1      Special: -

**CAUTION:** Misuse of empty containers can be hazardous. Empty  
containers can be hazardous if used to store toxic,  
flammable, or reactive materials. Cutting or welding  
of empty containers might cause fire, explosion or toxic  
fumes from residues. Do not pressurize or expose to open  
flame or heat. Keep container closed and drum bungs in  
place.

**HEALTH EMERGENCY TELEPHONE: (914) 831-3400 (EXT. 204)**

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ADDITIONAL COMMENTS

Code No. 02055

STATE OF MICHIGAN CRITICAL MATERIALS ACT (REVISED 1989)  
No critical materials present.

Lethal dose (human) 1.0-1.5 g/kg. Symptoms of ingestion: Behavioral changes, Drowsiness, Vomiting, Diarrhea, Thirst, Convulsions, Cyanosis, Rapid Heart Rate, Pulmonary edema and renal failure. Acute or chronic oral consumption for products containing ethylene glycol can produce adverse health effects in humans. Such products should NOT be used in potable water systems or other systems where contamination of potable water supplies is possible. This product, when introduced into water systems will be degraded biologically in both surface waters and waste treatment plants, and would therefore present no aquatic toxicity.

WHMIS Classification: Class D, Div. 2, Subdiv. A, Materials Causing Other Toxic Effects - Very Toxic.