

#### **SECTION 1- PRODUCT IDENTIFICATION**

**PRODUCT NAME** : 94590 PROTEX COOLING SYSTEM QUIK COOL **SYNONYMS** : Product is a mixture: No synonyms are available.

PRODUCT USE : Moderately Alkaline Material SUPPLIER : BARDAHL MANUFACTURING CORP.

SUPPLIER'S ADDRESS : 1400 NW 52<sup>ND</sup> ST, SEATTLE, WA 98107 (888)

**EMERGENCY RESPONSE PHONE** 227-3245: PERS: 1-800-633-8253

**NUMBER** 

#### **SECTION 2 – HAZARD IDENTIFICATION**

**CLASSIFICATION OF THE SUBSTANCE OR MIXTURE** 

**GHS U.S. – CLASSIFICATION** : H302 Harmful if swallowed. H315 Causes skin irritation

H319 Causes serious eye irritation

LABEL ELEMENTS : GHS – US HAZARD PICTOGRAMS The product is classified and labeled according

to the Globally Harmonized System (GHS).

HAZARD PICTOGRAMS :

SIGNAL WORD : WARNING

**HAZARD STATEMENTS**: H302 Harmful if swallowed.

(GHS-US)

: H315 Causes skin irritation.

: H319 Causes serious eye irritation.

PRECAUTIONARY STATEMENTS :

(GHS-US)

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

: P264 Wash skin and contaminated clothing thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P280 Wear suitable protective gloves/protective clothing/eye

protection/face protection.

: P301+ IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel

P312 unwell.

: P302+P352 : IF ON SKIN: Wash with plenty of soap and water.

: P305+351+ IF IN EYES: Rinse cautiously with water for several minutes. Remove

P338 contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

Dispose of contents/container in accordance with

local/regional/national/international regulations

OSHA HAZARDS : Not applicable.
TARGET ORGANS : Not applicable.

**CLASSIFICATION SYSTEM** : NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.

NFPA RATINGS (SCALE 0-4) Health = 2, Fire = 0, Reactivity = 0 HMIS RATINGS (SCALE 0-5) Health = 2, Fire = 0, Reactivity = 0

#### **SECTION 3 – COMPOSITON/INFORMATION ON INGREDIENTS**

CHEMICAL CHARACTERISTIC Mixtures

**DESCRIPTION** Mixture of the substances listed below with nonhazardous additions.

COMPONENT	PERCENT	CAS#	EC#	GHS CLASS	
Sodium Molybdate Dihydrate	1-5	10102-40-6	231-551-7	Eye Irrit Cat 2B	
Sodium Tolytriazole/Benzotriazole	1-5	64665-57-2	Not Found	Skin Corr Cat 1, Eye Dam Cat 1, Acute	
Mixture		15217-42-2		Tox Cat 4	
Propylene Glycol	60-80	57-55-6	200-338-0	Skin Irrit Cat 3, Eye Irrit Cat 2B	
Alkylether Hydroxypropyl Sultaine	1-5	108797-84-8	Not	Skin Irrit Cat 2, Eye Irrit Cat 2A	
		108797-85-9	Available		
Methyl-oxirane polymer with oxirane	0.1-1.0	67989-16-6	N/A	No need for classification according to	
				GHS criteria for this product.	

Irrit = Irritation, Cor = Corrosive, Dam = Damage, Cat = Category, Tox = Toxic, STOT = Specific Target Organ Toxicity.

#### **SECTION 4 - FIRST AID MEASURES**

#### **DESCRIPTION OF FIRST AID MEASURES**

**GENERAL** 

: Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice. Show the label where possible.

**EYE CONTACT** : Immediately flush eyes with water for at least 15 minutes. Hold eyelids open to

ensure adequate flushing. Get immediate medical attention.

**SKIN CONTACT** Remove contaminated clothing and shoes. Wash affected skin area with soap and

water. Delayed skin damage is possible if product is not completely washed off. Get

immediate medical attention.

SWALLOWING (INGESTION) : If ingested, dilute swallowed material by drinking water. DO NOT INDUCE VOMITING.

> If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. Never give anything by mouth to an unconscious person. Get immediate

medical attention.

**INHALATION** Remove to fresh air. Get immediate medical attention.

OTHER INSTRUCTIONS Rescue personnel must wear appropriate protective equipment during removal of

victims from contaminated areas. Treat symptomatically and supportively.

#### **SECTION 5 – FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA** SPECIAL PROTECTIVE **EQUIPMENT AND** 

: Dry chemical, foam, water or carbon dioxide.

PRECAUTIONS FOR FIRE

: In the event of a fire, wear a NIOSH (USA) or CEN (EU) approved, positive pressure, self-contained breathing apparatus (SCUBA) and full protective clothing. Evacuate all

non-essential personnel from the danger area.

**FIGHTERS** 

: No further relevant information is available.

**UNUSUAL FIRE AND EXPLOSION HAZARDS** 

#### **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT & : Restrict access to keep out unauthorized or unprotected personnel. Wear protective equipment. Avoid inhalation and direct contact.

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#### **EMERGENCY PROCEDURES**

ENVIRONMENTAL PROCEDURES METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

- Keep spilled material away from sewage/drainage systems and waterways.
- All clean-up personnel must be properly trained. Confine the spill and remove incompatible materials and ignition sources. Ensure adequate ventilation. Secure the source of the leak if conditions are safe. Neutralize spill and collect using an appropriate absorbent material such as clay or vermiculite. Place waste in an appropriate container for disposal. Use care during clean-up to avoid exposure to the material and injury from broken containers.

#### **SECTION 7 – HANDLING AND STORAGE**

PRECAUTIONS FOR SAFE HANDLING

: Use with adequate ventilation. Wear proper protective equipment. Do not mix with water or acids without proper dilution and agitation to prevent a potentially violent reaction.

CONDITIONS FOR SAFE STORAGE

: Store in closed, properly labeled containers. Protect containers from heat, physical damage, ignition sources and incompatible materials. Have emergency equipment for fires and spills readily available.





#### SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

TLV (THRESHOLD LIMIT VALUE)

: The TLV in section in section III is the ACGIH/TLV-TWA (threshold limit value/time weighted average concentration for an eight hour work day). The STEL is the short term exposure limit and the (Ceil) is the ceiling limit.

COMPONENT	OSHA PEL – TWA	ACGIH – TLV	ACGIH – STEL
Sodium Molybdate Dihydrate	5 mg/m³ (as Mo)	0.5 mg/m <sup>3</sup> (as Mo)	Not Established
Sodium Tolytriazole/Benzotriazole	Not Established	Not Established	Not Established
Mixture			
Propylene Glycol	Not Established	Not Established	Not Established
Alkylether Hydroxypropyl Sultaine	Not Established	Not Established	Not Established
Methyl-oxirane polymer with oxirane	Not Established	Not Established	Not Established

**EYE PROTECTION** 

: Wear chemical splash goggles or face shield.

**SKIN PROTECTION** 

: Minimize contact with product. Wear chemical resistant coveralls, boots, gloves, apron and/or suitable long-sleeved clothing.

RESPIRATORY PROTECTION

In case of brief exposure use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.

VENTILATION

: Ensure adequate ventilation.

ADDITIONAL MEASURES

: Emergency eyewash and safety shower facilities should be available in the immediate work area.

REQUIRED WORK/HYGIENE

: Wash hands thoroughly after handling. Keep away from all food stuffs, beverages and feed. Do not eat, drink or smoke in work area.

#### **SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE** 

Clear colorless liquid with mild odor.

**ODOR** 

: Mild odor

**ODOR THRESHOLD** Not available 11.0 + 0.5 AS IS **MELTING POINT/FREEZING** Not available

**POINT** 

**BOILING POINT** Approx. 212° F.

FLASH POINT Non flammable, non combustible

**EVAPORATION RATE** Not available

Non flammable-Non combustible **FLAMMABILITY** 

LOWER FLAMMABILITY LIMIT Not available **UPPER FLAMMABILITY LIMIT** : Not available **VAPOR PRESSURE** Not available VAPOR DENSITY (AIR=1) Not available **RELATIVE DESNITY** : 1.06

**SOLUBILITY IN WATER** : Soluble in water PARTITION COEFFICIENT n-: Not available

**OCTANOL/WATER** 

**AUTOIGNITION TEMPERATURE** : Not available **DECOMPOSITION** Not available

**TEMPERATURE** 

#### **SECTION 10 – STABILITY AND REACTIVITY**

**STABILITY** : Stable under recommended storage conditions. **HAZARDOUS CONDITIONS TO** : No decomposition if used according to specifications

**AVOID** 

**INCOMPATIBLE MATERIALS** Keep away from strong acids.

HAZARDOUS DECOMPOSITION

**PRODUCTS** 

No dangerous decomposition products known.

#### **SECTION 11 – TOXICOLOGICAL INFORMATION**

TOXICOLOGICAL INFORMATION **Sodium Molybdate Dihydrate** 

**ACUTE TOXICITY** 

LD50 Intraperitoneal - rat - 520 mg/kg Remarks: Behavioral:Somnolence (general

depressed activity). Behavioral:Coma.

SKIN CORROSION/IRRITATION

SERIOUS EYE

Skin (rabbit): No irritation

Eyes (rabbit): Mild eye irritation.

DAMAGE/IRRITATION

CARCINOGENICITY There is no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC,

NTP or OSHA.

POTENTIAL HEALTH EFFECTS : Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation

**TOXICOLOGICAL INFORMATION** 

**ACUTE TOXICITY** 

Sodium Tolytriazole/Benzotriazole Mixtue

Sodium Tolytriazole: LD50 Oral (rat): 675mg/kg. Sodium Benzotriazole: LD50 Oral (rat): 560mg/kg.

**HUMAN TOXICITY LEVELS** Not Found.

**TOXICOLOGICAL INFORMATION** : Propylene Glycol

**ACUTE TOXICITY** LD50 Oral (rat): 20,000 mg/kg, LD50 Dermal (rabbit): 20,800 mg/kg, LC50 Inhalation:

Not applicable.

**CARCINOGENICITY** : Not listed, IARC, NTP, ACGIH and OSHA.

**MUTAGENICITY** : No data available.

**SENSITISATION** : No evidence of sensitization.

TOXICOLOGICAL INFORMATION : Alkylether Hydroxypropyl Sultaine

ACUTE TOXICITY : LD50 Oral (Rat): 13,800mg/kg, Skin (rabbit): Slightly irritating, Eyes (rabbit): Slightly

irritating. Acute Inhalation Toxicity: No data found

**CARCINOGENICITY** : This product is not considered to be probable or suspected human carcinogens by

IARC, ACGIH, NTP or OSHA.

TOXICOLOGICAL INFORMATION : Methyl-oxirane polymer with oxirane

ACUTE ORAL TOXICITY : LD50 Oral (rat): > 2000 mg/kg, LD50 Dermal (rabbit): 10,200 mg/kg

**SKIN AND EYE IRRITATION** : Draize Test: Eyes: Non irritant, Skin: Non irritant.

**SENSITISATION**: Skin sensitizing effects were not observed in animal studies.

**SYMPTOMS OF EXPOSURE** : No significant symptoms are expected due to the non-classification of the product.

#### **SECTION 12 – ECOLOGICAL INFORMATION**

**ECOLOGICAL INFORMATION** : Sodium Molybdate Dihydrate

AQUATIC TOXICITY : No data available.
PERSISTENCE AND : No data available.

**DEGRADABILITY** 

**BIOACCUMULATIVE POTENTIAL**: No data available.

ECOLOGICAL EFFECTS : Sodium Tolytriazole/Benzotriazole Mixtue

**ECOTOXICITY (FLATHEAD** : 96 Hour LC50: 273 mg/L (95% C.I. 255 – 292 mg/L)

MINOW) 96 Hour Survival NOEC: 200 mg/L 96 Hour Survival LOEC: 400 mg/L

**ECOTOXICITY (WATER FLEA)** : 48 Hour LC50: 414 mg/L (95% C.I. 355-483 mg/L)

48 Hour Survival NOEC: 200 mg/L 48 Hour Survival LOEC: 400 mg/L

ECOLOGICAL INFORMATION : Propylene Glycol

**ECOTOXICITY** : 96 HR LC50 Oncorhynchus Mykiss 51600 mg/L [static]

96 HR LC50 Pimephales Promelas 51400 mg/L [static]

96 HR LC50 Pimephales Promelas 710 mg/L 24 HR EC50 Daphnia Magna > 10000 mg/L 48 HR EC50 Daphnia Magna > 1000 mg/L [static]

96 HR EC50 Pseudokirchneriella Subcapitalta 19000 mg/L

PERSISTENCE AND : Readily biodegradable.

DEGRADABILITY

MOBILITY: This material is expected to have very high mobility in soil. It does not absorb to

most soil types.

ECOLOGICAL INFORMATION : Alkylether Hydroxypropyl Sultaine

**ECOTOXICITY** : Not available. **PERSISTENCE AND** : No data available.

**DEGRADABILITY** 

**BIOACCUMULATIVE POTENTIAL**: No data available.

ECOLOGICAL INFORMATION : Methyl-oxirane polymer with oxirane

**ECOTOXICITY** : Toxicity to fish: LC50 (96 h) 105 mg/l, Oncorhynchus mykiss

Aquatic invertebrates: EC50 (48 h) 1,033 mg/l, Daphnia magna

Aquatic plants: EC50 (72 h) 370 mg/l, algae

PERSISTENCE AND BIODEGRADABILITY

: Assessment: Readily biodegradable (according to OECD criteria)

MOBILITY

: The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is possible.

#### **SECTION 13 - DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL : This product must be disposed of in accordance with Federal, state and local

environmental regulations. Discarded materials may be considered hazardous waste due to pH/corrosivity. It is the responsibility of the product user to determine at the time of disposal whether a material containing, or derived from this product, should

be classified as a hazardous waste.

#### **SECTION 14 - TRANSPORTATION INFORMATION**

DOT/IMDG/ IATA PROPER

SHIPPING NAME

: Not Hazardous

HAZARD CLASS AND LABEL : Not Applicable.
UN NUMBER : Not Applicable.
PACKAGING GROUP : Not Applicable.
EPA REPORTABLE QUANTITY : Not Applicable.

(RQ)

MARINE POLLUTANT : Not listed.

EMERGENCY RESPONSE GUIDE : Not Applicable.

#### **SECTION 15 - REGULATORY INFORMATION**

#### U.N. GHS CLASSIFICATION & LABELING INFORMATION: See Section 2 for GHS Hazard Information

#### **U.S. FEDERAL REGULATORY INFORMATION:**

LISTED CARCINOGEN : Not listed.

**TSCA STATUS**: The ingredients of this product are listed in TSCA inventory (40CFR 710.)

**SARA SECTION 302** : No chemicals in this material are subject to the reporting requirements of SARA Title

III, Section 302.

SARA SECTION 312 : Not Applicable

**SARA SECTION 313** : This material does not contain any chemical components with known CAS numbers

that exceed the threshold (De Minimis) reporting levels established by SARA Title III,

Section 313.

NFPA HEALTH : 2 NFPA FLAMMABILITY : 0 NFPA REACTIVITY : 0

#### **EUROPEAN UNION REGULATORY INFORMATION:**

**EC CLASSIFICATION** : Non Hazardous

**DSD/DPD RISK (R) PHRASES** : R22: Harmful is swallowed.

R36/38: Irritating to eyes and skin.

DSD/DPD SAFETY (S) PHRASES : S1/2: Keep locked up and out of reach of children.

S24/25: Avoid contact with eyes and skin.

S26: In case of contact with eyes, rinse immediately with

plenty of water and seek medical advice.

S36/S37/39: Wear suitable protective clothing, gloves and

eye/face protection.

S45: In case of accidents or if you feel unwell, seek medical

advice immediately. Show label where possible.

S61: Avoid release to the environment. S62: If swallowed, do not induce vomiting.

S64: If swallowed, rinse mouth with water if victim is

conscious.

**DSD/DPD HAZARD SYMBOL** : Xi: Irritant

#### **CANADIAN REGULATORY INFORMATION:**

WHMIS CATEGORY : D2B: Materials that cause other toxic effects (TOXIC).

Listed

DOMESTIC SUBSTANCES LIST

(DSL)

**INGREDIENT DISCLOSURE LIST**: Listed

DISCLAIMER : The information contained herein has been compiled from sources believed to be

**SECTION 16 - OTHER INFORMATION** 

realiable and accurate to the best of our knowledge at this date. It is provided without warranty, expressed or implied, as to the results of use of this information or to the product to which it relates. Bardahl Co. assumes no responsibility for injury to any person or property resulting from any use of the material. Each user assumes the risk in their use of this product and should review the data and

recommendations in the specific context of their intended use.

**CERCLA** : Comprehensive Environmental Response, Compensation, and Liability Act.

**EINECS**: European Inventory of Existing Commercial Chemical Substances

IMDG: International Maritime Code for Dangerous GoodsIARC: International Agency for Research on CancerIATA: International Air Transportation Association

ACGIH : American Conference of Governmental Industrial Hygienists

NFPA : National Fire Protection Association (USA)

NTP : National Toxicology Program

SARA : Superfund Amendments and Reauthorization Act

TSCA : Toxic Substances Control Act

HMIS : Hazardous Materials Identification System (USA)WHMIS : Workplace Hazardous Materials Information System

**LC50** : Lethal concentration, 50 percent

**LD50** : Lethal dose, 50 percent

**STOT** : Systemic Target Organ Toxicity

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