

HELION INDUSTRIES INC -- 53009A CORROSION INHIBITOR, LIQUID COOLING SYSTEM --
6850-01-287-8067

===== Product Identification =====

Product ID:53009A CORROSION INHIBITOR, LIQUID COOLING SYSTEM

MSDS Date:03/01/1999

FSC:6850

NIIN:01-287-8067

Status Code:A

MSDS Number: CJDJJ

=== Responsible Party ===

Company Name:HELION INDUSTRIES INC

Address:681 MAIN ST, BLDG 12

City:BELLEVILLE

State:NJ

ZIP:07109

Cou

ntry:US

Info Phone Num:973-759-0105

Emergency Phone Num:800-255-3924

Resp. Party Other MSDS Num.:041297

CAGE:0AP29

=== Contractor Identification ===

Company Name:HELION INDUSTRIES INC

Address:681 MAIN ST, BLDG 12

Box:City:BELLEVILLE

State:NJ

ZIP:07109

Country:US

Phone:800-327-3456

Contract Num:SP0450-99-M-C079

CAGE:0AP29

Company Name:QUALCHEM CO DIV OF GREEN GLOBE INDUSTRIES INC

Address:600 MEADOWLANDS PKY NO 20

Box:City:SECAUCUS

State:NJ

ZIP:07094

Country:US

Phone:800-327-3456 FAX: 201-842-130

7

Contract Num:SP0450-99-M-NA29

CAGE:07XT7

Company Name:QUALCHEM CO DIV OF GREEN GLOBE INDUSTRIES INC

Address:600 MEADOWLANDS PKY NO 20

Box:City:SECAUCUS

State:NJ

ZIP:07094

Country:US

Phone:800-327-3456 FAX: 201-842-1307

Contract Num:SP0450-99-M-NF96

CAGE:07XT7

=====
===== Composition/Information on Ingredients =====
=====

Ingred Name:SODIUM 2-MERCAPTOBENZOTHIAZOLE (AS 50% SOLUTION)

CAS:2492-26-4

= Wt:3.

Ingred Name:POTASSIUM SILICATE

CAS:1312-76-1

= Wt:4.6

Ingred Name:WATER

CAS:7732-

18-5

RTECS #:ZC0110000

= Wt:63.4

Ingred Name:SODIUM METABORATE OCTAHYDRATE

CAS:35585-58-1

= Wt:29.

=====
===== Hazards Identification =====
=====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:EYE: MAY CAUSE IRRITATION OR BURNS ON
PROLONGED CONTACT. INHAEL: HIGH VAPOR CONCENTRATIONS MAY CAUSE
DIZZINESS OR NAUSEA AND OTHER CENTRAL NERVOUS SYST EFFECTS .SKIN:
PROLONG

CONTACT MAY IRRITATE SKIN OR DRY SKIN CAUSING DERMATITIS.

INGESTION: MAY CAUSE IRRITATION TO DIGESTIVE TRACT RESULTING IN NAUSEA &/OR VOMITING.

Explanation of Carcinogenicity: THIS PRODUCT DOES NOT CONTAIN ANY INGREDIENTS DESIGNATED BY IARC/NTP/ACGIH/OSHA AS PROBABLE CARCINOGEN.

=====
===== First Aid Measures =====

First Aid: INHALATION: REMOVE TO FRESH AIR. ADMINISTER OXYGEN SEEK MEDICAL HELP. EYE: FLUSH WITH WATER, SEEK MED HELP. SKIN: FLUSH

WITH WATER, REMOVE CONTAMINATED CLOTHS. IF SKIN IRRITATION DEVELOPS SEEK MEDICAL ASSISTANCE. INGESTION: GIVE SEVERAL GLASSES OF WATER, DO NOT INDUCE VOMITING. SEEK MEDICAL ATTENTION. NOTE TO DOCTOR: ALL TREATMENTS SHOULD BE BASED ON OBSERVED SIGNS & SYMPTOMS OF DISTRESS. THE PRINCIPAL MANIFESTATION OF OVEREXPOSURE IS CORROSION OR BURNS.

=====
===== Fire Fighting Measures =====

Flash Point Method: TCC

Flash Point: NONE TO BOILING

Lower Limits: N

/APPLICABLE

Upper Limits: N/APPLICABLE

Extinguishing Media: WATER FOG, FOAM, CARBON DIOXIDE, DRY CHEMICAL.

Fire Fighting Procedures: NOT COMBUSTIBLE. SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE SHIELD.

Unusual Fire/Explosion Hazard: CONTAINERS CAN RUPTURE & EXPLODE UNDER FIRE CONDITIONS DUE TO PRESSURE & VAPOR BUILDUP

=====
===== Accidental Release Measures =====

Spill Release Procedures: ABSORB ON FIRE RETARDANT MATERIAL. PICK UP & DISPOSE OF AT APPROPRIATE WASTE FACILITY IN ACCORDANCE TO LOCAL, STATE OR FEDERAL REGULATIONS. REPORT SPILL TO APPROPRIATE AUTHORITIES.

=====
===== Handling and Storage =====

Handling and Storage Precautions: KEEP IN COOL DRY PLACE.

Other Precautions: CLEAR ALKALINE LIQUID WITH BLAND ODOR. MATERIAL CONTAINS SODIUM METABORATE-8H₂O, 2-MERCAPTOBENZOTRIAZOLE AND SODIUM METASILICATE, USE CAUTION WHEN HANDLING.

=====
===== Exposure Controls/Personal Protection =====

Resp

iratory Protection:NONE NEEDED UNDER NORMAL CONDITIONS.

Ventilation:KEEP CONTAINERS CLOSE WHEN NOT IN USE.DO NOT STORE NEAR FOOD.

Protective Gloves:CHEMICAL RESISTANT GLOVES.

Eye Protection:GOGGLES AND OR SAFETY GLASSES WITH FULL FACE SHIELD.

Supplemental Safety and Health

MATERIAL CONTAINS SODIUM METABORATE-8H₂O, 2-MERCAPTOBENZOTRIAZOLE AND SODIUM METASILCATE USE CAUTION WHEN HANDLING.

===== Physical/Chemical Properties =====

HCC:B3

Boiling Pt:=100.C, 212.

F

Melt/Freeze Pt:=-34.4C, -30.F

Vapor Pres:17MM OF HG

Vapor Density:NOT ESTABL

Spec Gravity:1.202 15.5/15.5C

pH:12.5 /-0.5

Viscosity:14CPS

Evaporation Rate & Reference:1(WATER=1)

Solubility in Water:COMPLETE

Appearance and Odor:CLEAR LIQUID WITH BLAND ODOR

Percent Volatiles by Volume:~75%

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

ACIDS, REDOX AGENTS.

Hazardous Decomposition Products:OXIDES OF SULFUR AND NITROGEN.

=====

===== Toxicological Information =====

Toxicological Information:EYE:MAY PRODUCE REDNESS,BURNING,STINGING.PROL &/OR REP CONTACT MAY CAUSE CHEM CONJUNCTIVITIS WHICH MAY CAUSE BLINDNESS.SKIN:MAY CAUSE REDNESS,FLAKING,DRYING.PROL &/OR REP CONTACT MAY CAUSE DERM&BURNS. INGEST:MAY CAUSE NAU,VOMIT,DIARR,IRRIT/BURNS TO DIGESTIVE SYS.INHAL:MAY CAUSE IRRIT &/OR BURNS TO BRONCHIAL MEMBRANES &/OR PULM EDEMA. PROD DOESNT CONTAIN TERATOGENIC INGREDIENTS NOR ANY KNOWN

MUTAGENIC INGREDIENTS.

=====
Ecological Information
=====

Ecological:ENVIRONMENTAL FATE & EFFECTS ARE NOT ESTABLISHED. PRODUCT CONTAINS SURFACTANTS WHICH MAY CAUSE LOCALIZED FISH KILL,BUT NO PERSISTENT EFFECTS WILL RESULT.

=====
Disposal Considerations
=====

Waste Disposal Methods:THE PRODUCT IS SUITABLE FOR DISPOSAL BY AN APPROVED FACILITY OR CAN BE DISPOSED OF AT ANY GOVERNMENT APPROVED WASTE SITE.

=====
MSDS Transport Information
=====

Transport Information:PER MSDS: DOT SHIPPING NAME: CHEMICALS N.O.I., DOT HAZ CLASS/UN/PRODUCT RQ:N/A. DOT LABEL-NOT REGULATED-NONE REQUIRED.

=====
Regulatory Information
=====

SARA Title III Information:SEC 302 EXT HAZ SUBST/SEC 311/312 HAZ CAT/SEC 313 TOX CHEMS-NONE.RCRA STATUS:NONE PER 40CFR PART 261D.CERCLA RQ:NONE.

Federal Regulatory Information:TSCA STATUS:ALL INGREDIENTS ARE IN TSCA

INVENTORY.

State Regulatory Information:CALIFORNIA PROP 65:NONE OF PRODUCTS COMPOSING THIS MIXTURE IS LISTED UNDER PROP 65.NEW JERSEY RIGHT TO KNOWN INFO:WATER (7732-18-5),SODIUM MERCAPTOBENZOTIAZOLE (2494-26-4), SODIUM METABORATE OCTAHYDRATE (35585-58-1), POTASSIUM SILICATE (1312-76-1).

=====
Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.