

MATERIAL SAFETY DATA SHEET

NALCO DIVERSIFIED TECHNOLOGIES, INC.
P.O. BOX 200
CHAGRIN FALLS, OH 44022
440/247-5000

PRODUCT: CW-225

For sales office or product literature call (800) 669-0053

IN THE EVENT OF A CHEMICAL SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CALL
CHEMTREC AT 1-800-424-9300 OR INTERNATIONALLY CALL (INT'L) + 1-703-527-3887.

K#: 1136

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CW-225
APPLICATION: COOLING WATER INHIBITOR
CHEMICAL DESCRIPTION: Carboxylate, Anionic polymer, Phosphonate,
Substituted triazole, Caustic, Inorganic salt(s),
Water
COMPANY IDENTIFICATION: Nalco Diversified Technologies, Inc.
P.O. Box 200
Chagrin Falls, OH 44022
EMERGENCY TELEPHONE NUMBER: 1-800-424-9300 (24 Hours) CHEMTREC or
Internationally call (INT'L) + 1-703-527-3887

NFPA 704M/HMIS RATING:
HEALTH: 3/3 FLAMMABILITY: 1/1 REACTIVITY: 0/0 OTHER:
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

2. COMPOSITION/INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical substance(s) as hazardous. Consult section 15 for the nature of the hazard(s).

Hazardous Substances(s)	CAS NO	% (w/w)	TLV/PEL
Sodium Hydroxide	1310-73-2	1.0-5.0	
Sodium Molybdate Dihydrate	10102-40-6	1.0-5.0	

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

Corrosive. May cause tissue damage. Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Keep container tightly closed and in a well-ventilated place. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Protect product from freezing. Wear a face shield. Wear chemical resistant apron, chemical splash goggles, impervious gloves and boots. May evolve oxides of carbon (COx) under fire conditions. May evolve oxides of nitrogen (NOx) under fire conditions. May evolve oxides of phosphorus (POx) under fire conditions.

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PRIMARY ROUTE(S) OF EXPOSURE:

Eyes, Skin

HUMAN HEALTH HAZARDS - ACUTE:

EYE CONTACT:

Corrosive. Will cause eye burns and permanent tissue damage.

SKIN CONTACT:

May cause severe irritation or tissue damage depending on the length of exposure and the type of first aid administered.

INGESTION:

Not a likely route of exposure. Corrosive; causes chemical burns to the mouth, throat and stomach.

INHALATION:

Not a likely route of exposure. Irritating, in high concentrations, to the eyes, nose, throat and lungs.

SYMPTOMS OF EXPOSURE:

Acute:

A review of available data does not identify any symptoms from exposure not previously mentioned.

Chronic:

A review of available data does not identify any symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS:

A review of available data does not identify any worsening of existing conditions.

4. FIRST AID MEASURES

EYE CONTACT:

PROMPT ACTION IS ESSENTIAL IN CASE OF CONTACT. Immediately flush eye with water for at least 15 minutes while holding eyelids open. Get immediate medical attention.

SKIN CONTACT:

Immediately flush with plenty of water for at least 15 minutes. For a large splash, flood body under a shower. Remove contaminated clothing. Wash off affected area immediately with plenty of water. Get immediate medical attention. Contaminated clothing, shoes, and leather goods must be discarded or cleaned before re-use.

INGESTION:

DO NOT INDUCE VOMITING. If conscious, washout mouth and give water. Get immediate medical attention.

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INHALATION:

Remove to fresh air, treat symptomatically. Get medical attention.

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage. Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

5. FIRE FIGHTING MEASURES

FLASH POINT: None

EXTINGUISHING MEDIA:

Not expected to burn. Use extinguishing media appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARD:

May evolve oxides of carbon (COx) under fire conditions. May evolve oxides of nitrogen (NOx) under fire conditions. May evolve oxides of phosphorus (POx) under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING:

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Restrict access to area as appropriate until clean-up operations are complete. Ensure clean-up is conducted by trained personnel only. Ventilate spill area if possible. Do not touch spilled material. Stop or reduce any leaks if it is safe to do so. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Notify appropriate government, occupational health and safety and environmental authorities.

METHODS FOR CLEANING UP:

SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. **LARGE SPILLS:** Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Wash site of spillage thoroughly with water. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

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ENVIRONMENTAL PRECAUTIONS:
Do not contaminate surface water.

7. HANDLING AND STORAGE

HANDLING:
Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Avoid generating aerosols and mist. Do not mix with acids. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available.

STORAGE:
Store the containers tightly closed. Store separately from acids. Store in suitable labelled containers.

UNSUITABLE CONSTRUCTION MATERIAL:
Do not use aluminum or mild steel., Other common metals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:
Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below.

ACGIH/TLV:
Substance(s)
Sodium Hydroxide CEILING: 2mg/m³

OSHA/PEL:
Substance(s)
Sodium Hydroxide CEILING: 2mg/m³
Molybdenum(as Mo), TWA: 5mg/m³
Soluble compounds

RESPIRATORY PROTECTION:
If significant mists, vapors or aerosols are generated an approved respirator is recommended. A dust, mist, fume cartridge may be used. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

VENTILATION:
General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne mist and vapor.

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PROTECTIVE EQUIPMENT:

Wear chemical resistant apron, wear a face shield with chemical splash goggles, impervious gloves and boots. Examples of impermeable gloves available on the market are neoprene, nitrile, PVC, natural rubber, viton and butyl (compatibility studies have not been performed). A full body suit is recommended if gross exposure is possible.

The availability of an eye wash fountain and safety shower is recommended.

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY:	1.07-1.18 @ 68°F/20°C
SOLUBILITY IN WATER:	Complete
DENSITY:	8.9-9.8 (LBS/GAL.)
pH (100%):	12-14
VISCOSITY:	7 cps @ 68°F/20°C
APPEARANCE AND ODOR:	A yellow clear liquid.
FREEZING POINT:	21°F/-6°C

10. STABILITY AND REACTIVITY

STABILITY:

Stable under normal conditions.

HAZARDOUS POLYMERIZATION

Hazardous polymerization will not occur.

CONDITIONS TO AVOID:

Freezing temperatures.

MATERIALS TO AVOID:

Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors.

HAZARDOUS DECOMPOSITION PRODUCTS:

Under fire conditions: Oxides of carbon, Oxides of nitrogen, Oxides of phosphorus

11. TOXICOLOGICAL INFORMATION

No toxicity studies have been conducted on this product.

SENSITIZATION:

This product is not expected to be a sensitizer.

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CARCINOGENICITY:

None of the substances in this product at greater than .1% are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS:

The following results are for a similar product.

ACUTE FISH RESULTS:

Species	Exposure	LC50	Tested Substance
Rainbow Trout	96 hrs	240 mg/l	Similar Product
Fathead Minnow	96 hrs	240 mg/l	Similar Product

Rating: Essentially non-toxic

ACUTE INVERTEBRATE RESULTS:

Species	Exposure	LC50	EC50	Tested Substance
Daphnia magna	48 hrs	560 mg/l		Similar Product

Rating: Essentially non-toxic

PERSISTENCY AND DEGRADATION:

Total Organic Carbon (TOC): 27,000 mg/l

Chemical Oxygen Demand (COD): 117,000 mg/l

Biological Oxygen Demand (BOD):

Incubation Period	Value	Tested Substance
	15,500 mg/l	

If released into the environment, see CERCLA/SUPERFUND in Section 15.

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: D002

Hazardous wastes must be transported by a licensed hazardous waste transporter and disposed of or treated in a properly licensed hazardous waste treatment, storage, disposal or recycling facility. Consult local, state, and federal regulations for specific requirements.

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14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name/Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are:

Proper Shipping Name:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
Technical Name(s):	SODIUM HYDROXIDE
UN/ID No.:	UN 3266
Hazard Class-Primary:	8
Packing Group:	PG III
Flash Point:	None
DOT Reportable Quantity (per package):	21,700 LBS.
DOT RQ Component:	SODIUM HYDROXIDE

15. REGULATORY INFORMATION

NATIONAL REGULATIONS, USA:

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:
Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason(s) is/are shown below.

Sodium Hydroxide: Corrosive
Sodium Molybdate Dihydrate: Exposure Limit - Compound Class

CERCLA/SUPERFUND, 40 CFR 117, 302:
This product contains the following substance(s) with Reportable Quantity(ies) (RQ):

RQ Substance	RQ:
Sodium Hydroxide	21,700 LBS.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986
(TITLE III) - SECTIONS 302, 311, 312 AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):
This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 and 312 (40 CFR 370):
Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

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- X Immediate (Acute) health hazard
- Delayed (Chronic) health hazard
- Fire Hazard
- Sudden Release of Pressure Hazard
- Reactive Hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):

This product does not contain substances on the List of Toxic Chemicals

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The chemical substances in this product are on the 8 (b) Inventory List (40 CFR 710).

U.S. DEPARTMENT OF AGRICULTURE (USDA):

USDA Inspection and Grading Programs - Food Safety and Inspection Service:
This product is authorized by USDA for use in federally inspected meat and poultry plants. Authorized use is under category: G-7, G-5

This product has been certified as KOSHER/PAREVE for year-round use INCLUDING THE PASSOVER SEASON by the CHICAGO RABBINICAL COUNCIL.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 (formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):

This product contains the following substances listed in the regulation:

Substance(s)	Citations
Sodium Hydroxide:	Sec. 311

CLEAN AIR ACT, Sec. 111 (40 CFR 60), Sec. 112 (40 CFR 61, 1990 Amendment), Sec. 611 (40 CFR 82, CLASS I and II Ozone depleting substances):

None of the substances are specifically listed in the regulation.

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

This product does not contain substances which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS:

None of the substances are specifically listed in the regulation.

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STATE RIGHT TO KNOW LAWS:

The following substances are disclosed for compliance with State Right To Know Laws:

Sodium Hydroxide 1310-73-2
Sodium Molybdate 7631-95-0

16. OTHER INFORMATION

Not Applicable

Abbreviations:

ACGIH = American Conference of Government Industrial Hygienists
TWA = Time Weighted Average TLV = Threshold Limit Values
PEL = Permissible Exposure Limit NE = Not Evaluated
NA = Not Applicable NR = Not Relevant

NOTICE: Seller warrants that this product complies with the specifications expressed in this label. Seller hereby disclaims all other warranties, expressed or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose. Seller's total liability to purchaser for the breach of any warranty shall be limited to the amount of the purchase price of this product. In no event shall seller have any liability to purchaser for special, incidental or consequential damages.

Date issued: 08/28/2001

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