



*Boiler Chemicals*  
 Form C-1-4/15

● Section 1 - PRODUCT IDENTIFICATION

MANUFACTURER'S NAME DEARBORN CHEMICAL CO., Subsidiary, W. R. Grace & Co.		EMERGENCY PHONE NO. 312/438-8241
ADDRESS 300 Genesee St., Lake Zurich, IL 60047		
CHEMICAL NAME AND SYNONYMS Cooling water microbicide	EPA Reg. No. 4643-10	TRADE NAME OR CODE IDENT. DEARBORN AQUA-SERV A-116

● Section 2 - INGREDIENTS

	CAS No.	%	EXPOSURE CRITERIA
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Alkyl trimethylene diamine	109-76-2	15.0	
Isopropyl alcohol	67-63-0	2.0	TWA: 400 ppm

NFPA Code: 1-0-0

● Section 3 - PHYSICAL DATA

BOILING POINT, 760mm Hg	N/K	MELTING POINT	N/A
SPECIFIC GRAVITY (H <sub>2</sub> O = 1)	0.998	VAPOR PRESSURE	N/K
VAPOR DENSITY (AIR = 1)	N/K	SOLUBILITY IN H <sub>2</sub> O, % BY WT.	Complete
% VOLATILES BY VOLUME	N/K	EVAPORATION RATE, _____ = 1	N/K
APPEARANCE AND ODOR	Yellow liquid with an alcoholic-amine odor		pH 8.2

● Section 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (and Method Used) None	FLAMMABLE LIMITS in AIR, % by VOLUME LOWER	AUTO IGNITION TEMPERATURE UPPER
EXTINGUISHING MEDIA <input checked="" type="checkbox"/> Water Fog <input type="checkbox"/> Foam <input type="checkbox"/> CO <sub>2</sub> <input type="checkbox"/> Dry Chemical <input type="checkbox"/> Other	SPECIAL FIRE FIGHTING PROCEDURES	

UNUSUAL FIRE AND EXPLOSION HAZARD

● Section 5 - REACTIVITY DATA

STABILITY (Normal Conditions) <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	CONDITIONS TO AVOID
INCOMPATIBILITY (Materials to Avoid)    with oxidizing material - should be fed separately	

HAZARDOUS DECOMPOSITION PRODUCTS    Nitrogen oxides

HAZARDOUS POLYMERIZATION <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur	CONDITIONS TO AVOID
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(over)

MATERIAL SAFETY DATA SHEET (Continued)

• Section 6 -- HEALTH HAZARD INFORMATION

EXPOSURE LIMIT

Not established

EFFECTS OF OVEREXPOSURE

INHALATION

None expected

INGESTION Harmful if swallowed. If ingested, dilute with milk, egg whites or large quantities of water. Consult a physician.

SKIN OR EYE CONTACT Irritating on contact with eyes, nose or throat. Irritating to skin on prolonged or repeated contact. Avoid contact with skin, eyes or clothing. In case of skin contact, wash off with soap and water. For eyes, flush with water for 15 minutes and consult a physician.

EMERGENCY AND FIRST AID PROCEDURES

• Section 7 -- SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS

RESPIRATORY PROTECTION (Specify Type)

Mechanical exhaust is adequate

EYE PROTECTION

Goggles or face shield

GLOVES (Specify Type)

Rubber or plastic

OTHER PROTECTIVE CLOTHING AND EQUIPMENT (Specify Type)

• Section 8 -- SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Mop up small spills and flush to drain with water, or use industrial absorbent and incinerate

WASTE DISPOSAL METHOD Triple rinse empty containers into system using the product and dispose of containers per EPA-DOT regulations referred to in Dearborn Technical Bulletin 51-104. Authorized scavenger service is recommended for disposal of product according to EPA regulations.

• Section 9 -- SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Agitate before using, keep container closed.

Freezes at 24° F. or -4° C.

OTHER PRECAUTIONS

For industrial use only. Keep out of reach of children.

Shipping Name: DOT NOT RESTRICTED - Compound Industrial Process Water Treating, Liquid

IATA

Prepared By W. M. Morris

Date: 6/78 (Revised 7/81)

**DEARBORN CHEMICAL COMPANY**

Subsidiary of W.R. GRACE &amp; CO.


**DISPOSAL OF DEARBORN MICROBICIDES  
and  
EMPTY MICROBICIDE CONTAINERS**
RECOMMENDED PROCEDURES
**MICROBICIDE CONTAINERS MAY BE DISPOSED OF AS FOLLOWS:**

- (a) Combustible containers such as fiber, plastic or similar materials should be disposed of in a pesticide incinerator or buried in an authorized landfill, except for small quantities which may be disposed of by open burning, if allowed locally.
- (b) Non-combustible containers such as metal drums should be triple rinsed after emptying, and the rinse liquid applied to the system usually treated with the microbicide. Containers then may be re-sealed and shipped to a drum reconditioner using a DOT "EMPTY" label. The B/L description must show:

EMPTY drums, Steel, Shipping, Used. Last Contained \_\_\_\_\_  
(Insert the chemical name(s) from the original label).

Specific DOT regulations can be found in 49 CFR Sections 172.203 (a) and (b) 172.450 and 173.29 (a) and (e).

- (c) If the containers are not shipped to a drum reconditioner, the rinsed containers should be punctured to facilitate drainage prior to transport to a facility for recycling as scrap metal or for disposal. All rinsed containers may be crushed and disposed of by burial in a sanitary landfill which conforms to State or local standards. Unrinsed containers should be disposed of in an authorized landfill.

PROHIBITED PROCEDURES

Do not dispose of any microbicide or its container:

- (a) In a manner differing from label instructions, or in violation of any applicable regulations.
- (b) By open dumping of the microbicide or its container.
- (c) By open burning of the microbicide or its container, except in the case of small quantities of combustible containers such as used for shipping DEARCIDE 708, 716 and 731.
- (d) So as to cause or allow fresh water or ocean dumping.