

**MATERIAL SAFETY DATA SHEET**

 Garratt-Callahan Company  
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**24 - HOUR EMERGENCY PHONE NUMBER: 303-623-5716**
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Customer Service, Product Information: 650-697-5811

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**SECTION #1 - IDENTIFICATION**

Product Name: FORMULA 32

Product Number: 0297010

Product Use: Micro-biocide for Cooling water

EPA Reg. Number: 8540-8

Chemical Family: Quaternary Ammonium Salt

**SECTION #2 - HAZARDOUS COMPONENTS\***

<u>COMPONENT</u>	<u>CAS NUMBER</u>	<u>PERCENT</u>	<u>ACGIH TLV</u>	<u>EXPOSURE LIMITS</u>	
				<u>OSHA PEL</u>	<u>OTHER</u>
Poly[oxyethylene(dimethyl iminio)ethylene(dimethylimino) ethylene dichloride]	31075-24-8	18%	None established	None established	Not applicable

\*NOTE: OSHA requires only that hazardous components be listed in this section.

**SECTION #3 - PHYSICAL DATA**

APPEARANCE:	Clear Light Brown liquid	% VOLATILES BY VOL:	82
BOILING POINT:	212 F	SOLUBILITY IN WATER:	Complete
VAPOR DENSITY:	Not applicable	SPECIFIC GRAVITY:	1.0-1.1
VAPOR PRESSURE:	Not applicable	EVAPORATION RATE (where butyl acetate = 1):	<1
pH:	5.0-8.0	ODOR:	Aromatic

## SECTION #7 - SPILL, LEAK & DISPOSAL PROCEDURES

**SPILL/LEAK:** Wear protective clothing. Small spills of one gallon or less may be flushed to drain with a large amount of water. For larger spills, contain with absorbent material. Place in suitable containers for disposal.

**DISPOSAL:** Dispose of in waste management facility or in compliance with federal, state and local regulations. If spill is not contaminated you may be able to dispose of material where normally used.

## SECTION #8 - SPECIAL PROTECTIVE MEASURES

**VENTILATION:** General ventilation is sufficient.

**RESPIRATORY PROTECTION:** None needed under normal use conditions.

**SKIN PROTECTION:** Rubber gloves

**EYE PROTECTION:** Chemical splash goggles

**OTHER:** Not required

**WORK/HYGIENIC PRACTICES:** Have eyewash station in work area. Remove contaminated clothing. Wash contaminated clothing before reuse. If liquid is adsorbed into leather shoes or gloves, discard.

## SECTION #9 - STORAGE & HANDLING INFORMATION

**HANDLING:** Avoid contact with eyes and skin.

**STORAGE:** Keep container covered and sealed when not in use. Store in a cool, dry area. Do not add water or any other material to product container or otherwise contaminate it.

## SECTION #10 - TRANSPORTATION INFORMATION

**DOT PROPER SHIPPING NAME:** Not regulated

**DOT HAZARD CLASS:** Not applicable

**UN/NA#:** Not applicable

**DOT LABEL REQUIRED:**

## SECTION #11 - REGULATORY INFORMATION

The following regulations are known to apply to the use and disposal of this product. Additional Federal, State and Local regulations may also be applicable.

**SARA TITLE III Section 311/312 Hazard Category:** Acute Hazard

**SARA TITLE III Section 313 Toxic Chemicals List (40CFR372)**

This product contains a chemical which is listed in Section 313 at or above minimum concentrations. The following listed chemicals are present:

None

**Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (40CFR302.4)**

This material is regulated under CERCLA and SARA Title III Section 304. This material is or contains chemical(s) listed in 40CFR Table 302.4. The Reportable Quantity(s) (RQ) are listed below.

None

**California Proposition 65-** The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer or reproductive toxicity.

No components of the product are listed.

**Toxic Substances Control Act (TSCA) Inventory Status:**

All components are listed on the TSCA Inventory.

**HMIS Rating:** HEALTH: 1 FIRE: 0 REACTIVITY: 0

**NFPA Rating:** HEALTH: 1 FIRE: 0 REACTIVITY: 0

## SECTION #12 - TOXICOLOGICAL INFORMATION

### Toxicity

Oral: LD50/ > 5.0 g/kg

Dermal: LD50/ > 2 g/kg

Inhalation: LD50/ > 26.4 mg/l

Chronic Effects: Not listed by ACGIH, IARC, NIOSH, NTP or OSHA

### Ecological Data

Fish: LC50/ Fathead minnow/ 96 Hours: 0.51 mg/L

Daphnia: LC50/Daphnia magna, 48 Hours: 1.87 ppm

Algae: No data available

Bioaccumulation: Material is not expected to bio-accumulate.

Persistence /  
Degradability: Material is biodegradable

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