

MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 1 Flammability = 0 Reactivity = 0
HMIS RATING: Health = 1 Flammability = 0 Reactivity = 0

SECTION I -- IDENTITY AND MANUFACTURER'S INFORMATION (440N-47B)**Manufacturer's Name:** HILLYARD INDUSTRIES**Product Name:** AFRC**Address:** 302 North Fourth Street**Date Prepared:** December 17, 1998

St. Joseph, MO 64501

Prepared by: Regulatory Affairs Department

Emergency Telephone No.: (800) 424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals.)

Other information calls: (816) 233-1321 (Ext. 8285)<http://www.hillyard.com>**SECTION II -- INGREDIENTS/IDENTITY INFORMATION****Components****(Specific Chemical Identity:**

Common Name(s)	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	%
n-Alkyl Dimethyl benzyl ammonium chloride	139-08-2	N.A.	N.A.	none	0.09
Dimethyl ethyl benzyl ammonium chloride	27479-28-3	N.A.	N.A.	none	0.09
Water	7732-18-5	none	none	N.A.	---
Ethoxylated Nonylphenol	9016-45-9	not est.	not est.	N.A.	---
Sodium carbonate	497-19-8	not est.	not est.	N.A.	---

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS**Boiling Point:** 208°F**Specific Gravity (H₂O = 1):** 25°C = 0.99 & 39°C = 1.00**Vapor Pressure (mm Hg.):** 17.5**Percent Volatile by Volume (%):** greater than 99%**Vapor Density (AIR = 1):** 0.6**Evaporation Rate (ethyl ether = 1):** slower than 1**Solubility in Water:** complete**Appearance and Odor:** blue liquid, floral odor**pH =** 11**SECTION IV -- FIRE AND EXPLOSION HAZARD DATA****Flash point:** None to Boiling (T.C.C.)**Flammable Limits:** LEL = N.A. UEL = N.A.**Extinguishing Media:** N.A.**Special Fire Fighting Procedures:** None known to manufacturer.**Unusual Fire and Explosion Hazards:** None known to manufacturer.**SECTION V -- PHYSICAL HAZARDS****Stability:** Stable **Conditions to Avoid:** None known to manufacturer.**Incompatibility (Materials to Avoid):** Anionic detergents and acids.**Hazardous Decomposition Products or Byproducts:** None known to manufacturer.**Hazardous Polymerization:** Will not Occur **Conditions to Avoid:** N.A.**SECTION VI -- HEALTH HAZARD DATA****Routes of entry:** Inhalation? no Skin? no Ingestion? no**HEALTH HAZARDS (1. Acute and 2. Chronic)**

1. Prolonged contact may cause mild eye irritation.

2. None known to manufacturer.

Chemical listed as Carcinogen or Potential Carcinogen:

National Toxicology Program = No I.A.R.C. Monographs = No OSHA = No

Signs and Symptoms of Exposure: Prolonged contact with eyes may cause mild irritation.**Medical Conditions Generally Aggravated by Exposure:** May aggravate pre-existing skin disorders (i.e., dermatitis, etc.) or respiratory ailments.

HEALTH HAZARD DATA (CONTINUED)

Emergency and First Aid Procedures: In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Wash contaminated clothing before reuse. If eye irritation persists get medical attention. If swallowed - drink large quantity of water, do not induce vomiting; call a physician.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Avoid contamination of storm drains, sewers, or other unauthorized treatment drainage systems and natural waterways. Do not contaminate food, feed, or drinking water..

Waste Disposal Method: Dispose of in accordance with applicable local, state, and federal regulations.

Precautions To Be Taken In Handling And Storing: Keep container closed when not in use. Container disposal: Do not reuse empty container. Rinse thoroughly before discarding in trash. Securely wrap original container (quart and gallons) in several layers of newspaper and discard in trash. Waste from normal use may be sewerred to a public-owned treatment works in compliance with applicable federal, state and local requirements.

Other Precautions: Avoid breathing fine fog spray mist. Avoid excess contact with skin. Do not take internally. This product contains no reportable quantities of toxic chemicals subject to reporting requirements of Sec. 313 of SARA Title III Emergency Planning & Community Right to Know Act of 1986 and 40 CFR Part 372.

SECTION VIII -- CONTROL MEASURES

Respiratory Protection (Specify Type): Not usually necessary. If spraying in a fine fog mist increase ventilation.

Ventilation: At least 3 air exchanges per hour suggest in good public restrooms.

Local Exhaust = Recommended Mechanical (General) = Recommended Special = N.A. Other = N.A.

Protective Gloves: None required. **Eye Protection:** None required.

Other Protective Clothing or Equipment: None.

Work / Hygienic Practices: Wash thoroughly after handling. Upon contact remove contaminated clothing; wash before reuse. Keep out of reach of children.

SECTION IX -- TRANSPORTATION INFORMATION

Applicable regulations: 49 CFR = no; IMCO = no; IATA = no

Proper shipping name: Cleaning compound

UN No.: not applicable

Limited Qty.: not applicable

Hazard Class: not applicable

Labels required: not required

DOT Exception: not applicable

EPA Hazardous waste number / code: not listed

Hazardous waste characteristics:

Ignitability = not applicable; **Corrosivity =** not applicable; **Reactivity =** not applicable

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