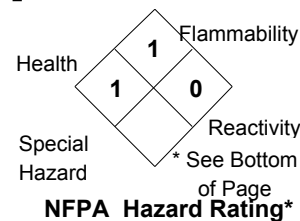


MATERIAL SAFETY DATA SHEET

Manufactured by:

101

Anderson
Chemical Company
325 SOUTH DAVIS AVENUE
LITCHFIELD, MINNESOTA 55355
(320) 693-2477



Product Name: Defend

24-HOUR EMERGENCY PHONE #: 1-800-424-9300 (CHEMTREC)

Revised: 8/21/2009 lmt
Supersedes: 12/3/2004

I. IDENTIFICATION

Chemical Name And Synonyms:

Not applicable

DOT Shipping Name

Not applicable

Chemical Family:

Quaternary Ammonium Chloride

DOT Hazard Class & I.D. Number

Not applicable

PG

II. HAZARDOUS INGREDIENTS

Component	CAS NO.	%	TLV	PEL	Toxic	Hazard
Quat. Ammonium chloride	mixture	4.5	not est.	not est.	NA	Corrosive to eyes.

**Toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR §372).

NA: Not applicable
NE: Not established

III. PHYSICAL DATA

Boiling Point: Above 212° F.

Specific Gravity: 1.042

Appearance: Clear, yellow liquid

Form: Liquid

Solubility In Water: Complete

Odor: Marine

pH, 1% Soln.: 10.1-10.6

IV. FIRE AND EXPLOSION HAZARD DATA

Flashpoint: Not Applicable

Extinguishing Media: Water fog - carbon dioxide - dry chemical - "alcohol" foam.

Special Fire: Although this product is not combustible, if a fire occurs in the near vicinity, good firefighting practice dictates the use of self-

Fighting Procedures: contained breathing apparatus and other protective gear. Cool fire exposed drums with water spray.

Unusual Fire And Explosion Hazards: Products of combustion are toxic

V. HEALTH HAZARD DATA

Carcinogenic: The raw materials used in this product are not considered to be a carcinogen by ACGIH and OSHA.

Effects Of Over-exposure: Causes irritation (possibly severe), burns to the eyes. May cause permanent eye damage. Causes irritation (possibly severe) to the skin. Causes irritation (possibly severe) to the respiratory tract. May be harmful if swallowed. The severity of effects depend on concentration and how soon after exposure the area is washed.

Emergency And First Aid Procedures: Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical attention.

Skin: Flush with water for 15 minutes. If irritation persists after rinsing, get medical attention. Remove contaminated clothing and wash before reuse.

Ingestion: Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing or unconscious person.

Inhalation: Remove victim to fresh air. If breathing difficulty occurs or persists, get medical attention.

* NFPA/HMIS Degree or Hazard: 4 = Extreme; 3 = High; 2 = Moderate; 1 = Slight; 0 = Insignificant.

Continued On Back

HMIS A. Safety Glasses B. Safety Glasses, Gloves C. Safety Glasses, Gloves, Apron D. Face Shield, Gloves, Apron E. Safety Glasses, Gloves, Dust Respirator F. Safety Glasses, Gloves, Apron, Dust Respirator G. Safety Glasses, Gloves, Vapor Respirator H. Splash Goggles, Gloves, Apron, Vapor Respirator I. Safety Glasses, Gloves, Vapor and Dust Respirator J. Splash Goggles, Gloves, Apron, Vapor and Dust Respirator K. Air Line, Hood or Mask, Gloves, Full Suit, Boots X. Ask your supervisor for guidance.

VI. REACTIVITY DATA

Stability - Unstable: **Stable: x**

Conditions To Avoid: Heat, flames and sparks.

Incompatibility: Strong oxidizing agents, anionic surfactants.
(Materials to Avoid)

Hazardous Decomposition Products: Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons.

VII. SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Small Spills: Wear appropriate protective equipment and clothing during cleanup. Use a noncombustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewers, basements or confined areas.

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

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: Respiratory protection is not required for normal use. If irritation occurs, respiratory protection may be necessary.

Ventilation: Use adequate general ventilation.

Protective Gloves: Rubber

Eye Protection: Eye protection is recommended.

Protective Clothing: If repeated or prolonged contact is anticipated, wear protective clothing appropriate to use conditions.

IX. SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling And Storing:

Avoid contact with skin and eyes. Wash hands thoroughly after handling. Store containers in dry, cool, well ventilated areas.

Other Precautions: Eye wash fountain and emergency showers are recommended.

X. REVISED INFORMATION

MSDS Status: Review and update.

The opinions expressed herein are those of qualified experts within ANDERSON Chemical Company. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of ANDERSON Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.