

# Extra Tuff AFC

## Liquid Alkaline Foam Cleaner

### DESCRIPTION

**Extra Tuff AFC** is a high foaming alkaline cleaner for use in meat, fish, poultry, beverage and dairy plants and is formulated to remove grease, oil, starch, protein and blood.

An excellent all-around cleaner, **Extra Tuff AFC** provides exceptional foaming and detergency and has the additional formulation flexibility in that chlorine bleach can be added to further aid in protein and starch removal. **Extra Tuff AFC's** thick foam adheres to vertical surfaces, increasing the contact time on food processing equipment and walls.

### SPECIAL INFORMATION

**Extra Tuff AFC** is a Canadian Food Inspection Agency (CFIA) approved product for use in registered food processing plants. Surfaces in direct food contact must be rinsed with potable water.

### DIRECTIONS

**Foam Units:**

Use 2.5 to 5 oz **Extra Tuff AFC** per US gallon of warm to hot water (20 to 40 ml/litre) (1:50 to 1:25). No additional foaming agent is required.

**Pressure Spray:**

Use 1.3 to 2.5 oz per US gallon of water (10 to 20 ml/litre) (1:100 to 1:50).

**Manual Cleaning:**

Follow all safety precautions. Use 1 to 3 oz per gallon of warm to hot water (8 to 25 ml/litre) (1:128 to 1:40). For heavily soiled surfaces use 6.5 oz per gallon of water (50 ml/litre) (1:20).

**Liquid Chlorine Bleach addition:**

Add 1 to 5 percent by volume of liquid chlorine bleach to your diluted **Extra Tuff AFC** cleaning solution (1:20 to 1:100).

### PHYSICAL DATA

Appearance	Liquid
Color	Pink
Foam	High
Odor	Mild, indistinct
pH (3.1%)	12.0 - 13.0

# MATERIAL SAFETY DATA SHEET

## SECTION 1 – PRODUCT/MANUFACTURER'S IDENTITY

Product Name: **EXTRA TUFF AFC**

WHMIS CODE: E

Product Use: *Foaming, alkaline cleaner.*

Proper Shipping Name: CAUSTIC ALKALI LIQUID, N.O.S.  
(sodium hydroxide)

Hazard Class: Class 8, P.G. II

UN Number: UN 1719

### HMIS

3	Health
0	Flammability
0	Reactivity
C	Personal

A=Goggles, B=Goggles & Gloves  
C=Goggles, Gloves and Apron

M-chem Technologies Inc.  
1607 Derwent Way  
Delta, BC V3M 6K8, Canada  
Phone: (604) 526-5655

### EMERGENCY PHONE

Canada: Canutec 613-996-6666  
U.S.A.: Chemtrec 800-424-9300

ABBREVIATION KEY: N/A=Not Applicable, N/E=Not Established, N/D=Not Determined, > =Greater Than

## SECTION 2 – HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS NO.	RANGE %	PEL	TLV
<b>SODIUM HYDROXIDE</b>	1310-73-2	10.0-15.0	2 mg/m3	2 mg/m3
LD50	340 mg/kg			
LD50	1350 mg/kg			
LC50	N/D			
<b>Tetrasodium Salt of Ethylenediaminetetraacetic Acid</b>	64-02-8	1.0-5.0	N/A	N/A
LD50 (oral rat)	3030 mg/kg			
LD50 (dermal rabbit)	>5000 mg/kg			
LC50	>100 mg/L			

## SECTION 3 – PHYSICAL DATA

<b>Color and Odor:</b> Clear pink, mild odor.	<b>Boiling Point:</b> N/D	<b>Vapor Pressure (mm HG):</b> N/D	<b>pH:</b> 13.0 – 14.0
<b>Physical State:</b> Liquid.	<b>Melting Point:</b> N/A	<b>Vapor Density:</b> N/D	<b>Specific Gravity:</b> 1.09 @ 20°C
<b>Coef. Water/Oil Dist:</b> Greater than 1.0	<b>Evaporation Rate:</b> N/D	<b>Solubility in Water:</b> Soluble	<b>Odor Threshold:</b> No Data

## SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

**Flash Point and Method:** None to 100°C (TCC)      **Sensitivity to Mechanical Impact:** None.      **Extinguishing Media:** Not flammable.  
**Flammable Limits:** None known.      **Sensitivity to Static Discharge:** None.      **Auto ignition Temperature:** None known.  
**Conditions of Flammability:** None.  
**Unusual Fire and Explosion Hazards:** Flammable hydrogen gas may liberate upon prolonged contact with sensitive metals (i.e. aluminum, zinc, etc.).  
**Hazardous Combustion Products:** Decomposition may produce oxides of carbon, and phosphorus upon thermal decomposition and other unidentifiable organic compounds.  
**Special Fire Fighting:** Wear full protective equipment, including a NIOSH/MSHA approved, self-contained breathing apparatus for fire fighting situations. Use water spray to cool all nearby fire exposed surfaces.

## SECTION 5 – REACTIVITY DATA

**Chemical Stability:** Stable under normal storage conditions.      **Hazardous Polymerization:** Will not Occur.  
**Incompatibility (material to avoid):** Strong oxidizers and acids.      **Hazardous Decomposition Products:** Carbon and phosphorus oxides.

## SECTION 6 – TOXICOLOGICAL DATA

**Exposure Limits:** See Section 2 under Hazardous Ingredient.      **Routes of Entry:** Skin, eyes, inhalation.  
**Irritancy of Product:** Corrosive to skin, eyes and respiratory system.      **Carcinogenicity:** None known.  
**Sensitization:** None known.      **Mutagenicity:** None known.  
**Name of Toxicological Synergistic Product:** None known.      **Reproductive Toxicity:** None known.  
**Teratogenicity:** None known.  
**Effects of Chronic Exposure:** Prolonged or repeated exposure can cause skin damage or dermatitis, respiratory disorder and or lung damage.  
**Effects of Acute Exposure to Product:** Product exposure can cause severe burn or damage to skin and eyes. Inhalation of vapors or mists causes respiratory discomfort such as breathing difficulties, burning, coughing, etc. Ingestion may cause gastro-intestinal and abdominal discomfort.

## SECTION 7 – PREVENTATIVE AND CONTROL MEASURES

**Respiratory Protection:** If product is misted or sprayed, or used in a confined area, use a NIOSH/MSHA approved dust/mist respirator.  
**Ventilation:** Good general ventilation or local exhaust ventilation for spraying and misting in confined areas.  
**Protective Gloves:** Natural or butyl rubber, nitrile or neoprene gloves.  
**Eye Protection:** Chemical goggles, safety goggles or face shield.  
**Protective Clothing and Equipment:** Long sleeve coveralls. Eye wash recommended in the immediate work area.  
**Storage and Handling Procedures:** Use good industrial hygiene. Do not get in eyes. Avoid contact with skin and clothing. Avoid breathing sprays or mists. Store in a cool, dry place away from incompatibles. Keep container closed when not in use. Do not mix with any other chemicals. Store at temperatures below 30°C (86°F) and keep from freezing.  
**Disposal Procedures for Spills or Leaks:** Wear protective equipment. Dike and contain large spills. Pump spills into an approved waste container. For small spills, soak up with a suitable absorbent such as clay, soil or commercially available absorbents, and then dispose of into an approved waste container. Keep away from sewers and out of natural waters.  
**Waste Disposal Method:** Reuse if possible, or otherwise dispose recovered material in accordance with all local, Provincial or Federal Regulations.  
**Special Shipping Information:** Store at temperatures below 30°C (86°F) and keep from freezing.

## SECTION 8 – EMERGENCY FIRST AID PROCEDURES

**First Aid:**  
If swallowed, give plenty of clean water to drink to dilute product. Do not induce vomiting. Call a Physician. In case of contact with eyes, flush with clean water for 15 minutes. Get medical attention. For contact with skin, wash with clean water and rinse well. If irritation occurs or persists, get medical attention.

## PREPARATION DATA

PREPARED BY: Technical Service / Regulatory Division      PHONE: 604-526-5655      LAST UPDATE: 07/04/11  
THE INFORMATION PROVIDED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN OBTAINED FROM CURRENT SOURCES AND IS BELIEVED TO BE RELIABLE