

MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT/MANUFACTURER'S IDENTITY

Product Name: Mark 11
Synonyms: ST-735, ST-738, ST-740, ST-740E, ST-745, ST-747, ST-2020
Company: Stearns Packaging Corporation
4200 Sycamore Avenue (53714)
PO Box 3216
Madison, WI 53704-0216
Phone: 800-655-5008
Fax: 608-246-5149

Formula ID Number: SL-30
MSDS File Name: MARK 11
EPA Reg #: 10324-120-3640
DOT Hazard Class: None
DOT Shipping Name: Disinfectant, NOI, liquid.
Item 57100, Sub. 3, Class 85
NSF Certified: D2, 7/20/04

Concentrate		In Dilution		HAZARD RATING
1	Flammability	0		
3	Health	1		3 = High
0	Reactivity	0		2 = Moderate
None	Special Hazard	None		1 = Slight
				0 = Insignificant

Emergency Contact: CHEM-TEL, 800-255-3924

Abbreviation Key: N.A.=Not Applicable,
N.D.=Not Determined

SECTION 2 – HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

CHEMICAL IDENTIFICATION	CAS NO.	HAZARD	OSHA PEL(ppm)	ACGIH TLV(ppm)	%(Optional)
Alkyl dimethyl benzyl ammonium chloride (C12-18)	68391-01-5	Corrosive			2 - 4
Alkyl dimethyl ethyl benzyl ammonium chloride (C12-14)	68956-79-6	Corrosive			2 - 4
Ethanol	64-17-5	Flammable	1000 (TWA)	1000 (TWA)	<1

SARA Section 313 Title III Notification Required: No

SECTION 3 – PHYSICAL DATA

Appearance and Odor: Red liquid, fresh scent
Solubility in water: Complete
Boiling Point: Over 210°F (over 99°C)
Melting Point: N.A.
Pour Point: N.D.

Vapor Pressure (mm Hg): N.D.
Vapor Density (Air=1): N.D.
Evaporation Rate (Butyl acetate=1): N.D.
VOC Content: N.D.

pH (Concentrate): 6.0 - 8.0
pH (1:64 Dilution): 7.0 ± 0.5
Specific Gravity: 1.008
Viscosity: 21.72 cs @ 24°C

SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method: Over 210°F
Flammable Limits: LEL: N.D., UEL: N.D.
Extinguishing Media: Dry chemical, foam, CO₂, water fog. Solid water streams may spread burning liquid.

Special Fire Fighting Procedures: Firefighters should wear full protective clothing including self-contained breathing apparatus. Cool fire exposed containers with spray.
Unusual Fire & Explosion Hazards: Irritating and toxic gases or fumes may be released during a fire.

SECTION 5 – REACTIVITY DATA

Chemical Stability: Stable: Unstable: _____
Conditions to Avoid: Heat and strong oxidizing agents.
Incompatibility (Materials to Avoid): Strong oxidizing agents (may result in fire); reducing agents.

Hazardous Polymerization: May Occur _____ Will Not Occur
Conditions to Avoid: None known
Hazardous Decomposition or By-Products: Carbon monoxide, carbon dioxide, and toxic hydrogen chloride vapors.

SECTION 6 – HEALTH HAZARD DATA/FIRST AID PROCEDURES

Health Hazards (Acute and Chronic): Ingestion of ethanol by pregnant women can cause reproductive toxicity to the fetus.
Signs and Symptoms of Exposure: Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting, and diarrhea and possibly death. Harmful if swallowed. Skin: Causes corrosive burns. Brief exposures may cause irritation and defatting of the skin. Exposures not promptly washed off may lead to toxic effects similar to ingestion. Harmful if absorbed through skin. Inhalation: Mists and vapors can irritate the throat and respiratory tract. High vapor concentrations may cause central nervous system effects. Symptoms may include headaches, dizziness, and drowsiness. Harmful if inhaled. Eyes: Causes burns and may result in permanent injury to eyes including blindness.
Medical Conditions Aggravated by Exposure: No data available.
Carcinogenicity: IARC Monographs? Yes _____ No
NTP? Yes _____ No OSHA Regulated? Yes _____ No
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

Emergency and First Aid Procedures:
Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation: If symptoms are experienced, move victim to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Eyes: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention at once.

SECTION 7 – PREVENTATIVE AND CONTROL MEASURES

Ventilation: Provide adequate local exhaust ventilation (explosion proof) to maintain worker exposure below exposure limits.
Skin Protection: Use impervious gloves (rubber or neoprene). Wear suitable protective clothing.
Eye Protection: Wear chemical goggles. Use face shield if splashing is possible.
Respiratory Protection: If exposure limits are exceeded or if irritation is experienced, NIOSH approved respiratory protection should be worn. Ventilation and other forms of engineering controls are often the preferred means for controlling chemical exposures. Respiratory protection may be needed for non-routine or emergency situations.
Other Precautions: Eye wash fountain and emergency showers are recommended. Keep out of the reach of children.

Steps to be Taken if Material is Spilled or Released: Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas where vapors may accumulate. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area.) Ventilate closed spaces before entering. All equipment used when handling the product must be grounded. Floor will be slippery. Do not touch or walk through spilled material. Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors. Prevent entry into waterways, sewers, basements, or confined areas. Absorb or cover the dry earth, sand, or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. For large spills, dike far ahead of liquid spill for later disposal. Water spray may reduce vapor but will increase foaming. Water may not prevent ignition in closed spaces.
Waste Disposal: Comply with all local, state, and federal regulations. Consult your state DNR or the EPA for specific questions. Wastewater should never enter a fresh water body without treatment.
Handling and Storage: Avoid contact with skin and eyes. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Keep container tightly closed and in a cool, well-ventilated place. Keep from freezing. Do not handle or store near an open flame, heat, or other sources of ignition. Prevent electrostatic charge buildup by using common bonding and ground techniques.

SECTION 8 – OTHER REGULATORY INFORMATION

State Right-to-Know lists:

Ethanol 64-17-5 AZ, CA, CAP65R, CT, FL, ID, MA, MN, NJ, PA, RI
Benzyl Chloride (trace impurity: <10ppm) AZ, CA, CAP65C, FL, IL, MA, MN, NJ, PA

This MSDS data relates only to the material designated and does not relate to its use with any other material or process. The data is believed to be accurate. However, since use conditions vary and are outside our control, Stearns Packaging Corporation makes no warranties, expressed or implied, and assumes no liability for failure to follow directions and safety precautions.

rev. 8/09/07