STEARNS.

Trade name: Mark E II

1 Identification of the substance/mixture and	l of the company/undertaking	
• 1.1 Product identifier		
• Trade name: Mark E II ST-756, ST-757, ST-758, ST-760, ST-	2145 ST-2146	
• Article number: SL45 EPA REG. #: 10324-108-3640	113, 01-21-0	
 1.2 Relevant identified uses of the substance or mixture a No further relevant information available. 	nu uses auviseu against	
Application of the substance / the preparation Disinfectant		
Product dilution information: 0.5 fl. oz. (17.78 ml) per 1 gallon of water for disinfection. (10 minute contact time) 0.5 fl. oz. (17.78 ml) per 1 gallon of water for non-food contact sanitizing. (3 minute contact time)		
 1.3 Details of the supplier of the Safety Data Sheet Stearns Packaging Corporation 4200 Sycamore Avenue (53714) PO Box 3216 Madison, WI 53704-0216 Phone: 800-655-5008 Email: stearns@stearnspkg.com Website: www.stearnspkg.com 		
• 1.4 Emergency telephone number: ChemTel Inc. (800)255-3924, +1 (813)248-0585		
2 Hazards identification 2.1 Classification of the substance or mixture 		
Classification according to Regulation (EC) No 1272/2005	3	
Product as SOLD Product at USE DILUTION		
GHS05 corrosion		
Skin Corr. 1C H314 Causes severe skin burns and eye	No pictogram	
damage.	Eye Irrit. 2B, H320 Causes eye irritaion	
Eye Dam. 1 H318 Causes serious eye damage.		
GHS07	Not classified.	
Acute Tox. 4 H302 Harmful if swallowed.	Not classified.	
Classification according to Directive 67/548/EEC or Directive 67/548/EC or Directi		
C; Corrosive R34: Causes burns.	Xi; Irritant	
Xn; Harmful	R36: Causes eye irritation.	

	(Contd. from page
Information concerning particular hazards for human and	environment:
The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.	The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Classification system:	
The classification is according to the latest editions of the EU-l	ists, and extended by company and literature data.
The classification is in accordance with the latest editions of in information from technical literature and by information provide	
2.2 Label elements	
 Labeling according to Regulation (EC) No 1272/2008 	
Product as SOLD	Product at USE DILUTION
The product is classified and labeled according to the CLP regulation.	The mixture does not meet the criteria for classification.
Hazard pictograms	
GHS05 GHS07	None
• Signal word Danger	Warning
Hazard-determining components of labelling:	
Alkyl (C12,C14,C16) Dimethyl Benzyl Ammonium Chloride decyldimethyloctylammonium chloride tetrasodium ethylenediaminetetraacetate dimethyldioctylammonium chloride	Alkyl (C12,C14,C16) Dimethyl Benzyl Ammonium Chloride decyldimethyloctylammonium chloride tetrasodium ethylenediaminetetraacetate dimethyldioctylammonium chloride
Hazard statements	
H302 Harmful if swallowed. H314+H318 Causes severe skin burns and serious eye damage.	H320 Causes eye irritation.
Precautionary statements	
 P260 Do not breathe mist/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P303+P361+P353+P310: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center / doctor. P363 Wash contaminated clothing before reuse. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/ physician. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.Call a POISON CENTER or doctor/ physician if you feel unwell. P405 Store locked up. P501 Dispose of contents/container in accordance with local regulations. 	Wash hands thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists get medical attention.

Trade name: Mark E II

(Contd. from page 2)

nmonium Chloride	2.5-10%
318	
	2.5-10%
318	
2; STOT SE 3, H335	
	2.5-4%
	2.5-10%
	2.5-10%
318	
	2.5-10%
318	
	2.5-10%
	19

• Additional information: For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

4.1 Description of first aid measures	
Product as SOLD	Product at USE DILUTION
• General information: Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.	No special measures required.

Trade name: Mark E II

(Contd. from page 3)

Product as SOLD	Product at USE DILUTION
• After inhalation: Supply fresh air; consult doctor in case of complaints. Provide oxygen treatment if affected person has difficulty breathing. In case of irregular breathing or respiratory arrest provide artificial respiration.	Remove victim to fresh air and keep comfortable for breathing.
• After skin contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor. Seek immediate medical help for blistering or open wounds.	If irritation occurs, rinse skin with water. If irritation persists get medical attention.
• After eye contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists get medical attention.
• After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.	Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
• 4.2 Most important symptoms and effects, both acute and delayed Strong caustic effect on skin and mucous membranes. Breathing difficulty Coughing Headache Dizziness Gastric or intestinal disorders. Nausea	No known effects.
• Hazards Danger of disturbed cardiac rhythm. Danger of gastric perforation. Danger of severe eye injury. Condition may deteriorate with alcohol consumption.	No known effects.
4.3 Indication of any immediate medical attention and spe	cial treatment needed
No further relevant information available.	Treat symptomatically.

5 Fire-fighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- For safety reasons unsuitable extinguishing agents: None.
- 5.2 Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters
- Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.
- Additional information No further relevant information available.

Trade name: Mark E II

(Contd. from page 4)

6 Accidental release measures 6.1 Personal precautions, protective equipment and emergency procedures **Product as SOLD** Product at USE DILUTION Use respiratory protective device against the effects of Use personal protective equipment as required. fumes/dust/aerosol. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water. Avoid contact of large amounts of spilled material and run off Inform respective authorities in case of seepage into water with soil and surface waterways. course or sewage system. 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid Large Spills: Flush area with water. Prevent entry into waterbinders, universal binders, sawdust), wavs Dispose contaminated material as waste according to Small Spills: Wipe up with absorbent material. item 13. Do not flush with water or aqueous cleansing agents Send for recovery or disposal in suitable receptacles. • 6.4 Reference to other sections See Section 7 for information on safe handling. See Section 7 for information on safe handling. See Section 8 for information on personal protection See Section 8 for information on personal protection equipequipment. ment. See Section 13 for disposal information. See Section 13 for disposal information.

7 Handling and storage

• 7.1 Precautions for safe handling Product as SOLD Product at USE DILUTION Use only in well ventilated areas. No special measures required. Prevent formation of aerosols. Avoid splashes or spray in enclosed areas. • Information about fire - and explosion protection: No special measures required. No special measures required. • 7.2 Conditions for safe storage, including any incompatibilities Storage: · Requirements to be met by storerooms and receptacles: Provide ventilation for receptacles. Keep out of reach of children. Avoid storage near extreme heat, ignition sources or open flame. · Information about storage in one common storage facility: Store away from foodstuffs. No storage precautions necessary. Store away from oxidizing agents. Do not store together with acids.

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(Contd. from page 5)

Product as SOLD	Product at USE DILUTION	
Further information about storage conditions:		
Store in cool, dry conditions in well sealed receptacles. Protect from freezing.	No storage precautions necessary.	
• 7.3 Specific end use(s) No further relevant information available.		

8 Exposu	re controls/personal protection	
• Additional	information about design of technical facilitie	ac: No further data: soo itom 7
Auditional	Product as SOLD	Product at USE DILUTION
• 8.1 Control	I parameters	
	s with limit values that require monitoring at t	the workplace:
64-17-5 et	hanol	Not applicable
PEL (USA)	Long-term value: 1900 mg/m ³ , 1000 ppm	
REL (USA)	Long-term value: 1900 mg/m³, 1000 ppm	
TLV (USA)	Short-term value: 1880 mg/m³, 1000 ppm	
EL (Canada)	Short-term value: 1000 ppm	
EV (Canada)	Long-term value: 1,900 mg/m³, 1,000 ppm	
LMPE (Mexico)	Long-term value: 1900 mg/m³, 1000 ppm A4	
Additional were used as	information: The lists valid during the making s basis.	
• 8.2 Exposu	ire controls	
Personal p	rotective equipment:	
General pr	otective and hygienic measures:	
contact. The usual p when hand Keep away Immediatel Wash hand	yomen should strictly avoid inhalation or skin precautionary measures are to be adhered to ling chemicals. If from foodstuffs, beverages and feed. If y remove all soiled and contaminated clothing. Is before breaks and at the end of work. act with the eyes and skin.	Not required under normal conditions of use.
Respirator	y protection:	
Use suitabl ficient venti	e respiratory protective device when aerosol or	A respirator is not required under normal and intended conditions of use.

Trade name: Mark E II (Contd. from page 6) Product as SOLD Product at USE DILUTION · Protection of hands: No protective equipment is needed under normal conditions. Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. · Material of gloves The selection of the suitable gloves does not only depend No protective equipment is needed under normal on the material, but also on further marks of quality and conditions. varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. · Penetration time of glove material The exact break through time has to be found out by the No protective equipment is needed under normal manufacturer of the protective gloves and has to conditions. be observed. Gloves made of the following materials are suitable: Neoprene gloves No protective equipment is needed under normal conditions. Butyl rubber, BR Nitrile rubber, NBR • Eye protection: No protective equipment is needed under normal conditions. Safety glasses • Body protection: Not required under normal conditions of use. No protective equipment is needed under normal Protection may be required for spills. conditions. · Limitation and supervision of exposure into the environment No further relevant information available. No further relevant information available. 9 Physical and chemical properties

	Product as SOLD	Product at USE DILUTION
9.1 Information on basic physical and chemical properties		
 General Information Appearance: Form: Color: Odor: Odor: Odor threshold: 	Liquid Red Pleasant Not determined.	Liquid Light Red Pleasant Not determined.
• pH-value at 20 °C:	8.0 ± 0.5 for concentrate	7.0 ± 0.5

(Contd. on page 8)

Trade name: Mark E II

(Contd. from page 7)

		(Conta. from page
	Product as SOLD	Product at USE DILUTION
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. 212 °F / 100 °C	Not applicable. 100° C / 212° F
Flash point:	>212 °F / >100 °C	Not determined.
 Flammability (solid, gaseous): 	Not applicable.	Not applicable.
Ignition temperature:	Not determined.	Not applicable.
Decomposition temperature:	Not determined.	Not determined.
Self-igniting:	Product is not self-igniting.	Product is not self-igniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.	Product does not present an explosion hazard.
• Explosion limits: Lower: Upper:	Not determined. Not determined.	Not determined. Not determined.
 Vapor pressure at 20 °C: 	23 hPa	Not determined.
 Density at 20 °C: Relative density Vapor density Evaporation rate 	0.9992 g/cm³ (8.338 lbs/gal) Not determined. Not applicable. Not applicable.	1.00 g/cm ³ Not determined. Not applicable. Not applicable.
Solubility in / Miscibility with water:	Easily soluble.	Complete
Partition coefficient (n-octanol/water):	Not determined.	Not determined.
• Viscosity: Dynamic: Kinematic:	100 mPas Not applicable.	Not determined. Not determined.
9.2 Other information	No further relevant information available.	No further relevant information available.

10 Stability and reactivity

• 10.1 Reactivity Not determined.

- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications. Keep away from heat and direct sunlight.
 10.3 Possibility of hazardous reactions Toxic fumes may be released if heated above the decomposition point. Reacts with many consumer products, releasing chlorine or chlorine oxide gas. Exothermic reaction with acids. Reacts with certain metals. Contact with acids releases toxic gases. Reacts with strong oxidizing agents.
 10.4 Conditions to avoid Store away from oxidizing agents.
- Incompatible materials:
 Caution! Do not use in conjunction with other products. Dangerous gases (chlorine) may be given off. Contact with acids liberates toxic gases. Strong oxidizing agents.

Trade name: Mark E II	
• 10.6 Hazardous decomposition products: Hydrogen chloride (HCl) Chlorine Nitrogen oxides (NOx) Carbon monoxide and carbon dioxide	(Contd. from page 8)
11 Toxicological information	
Product as SOLD	Product at USE DILUTION
11.1 Information on toxicological effects	
Acute toxicity:	
809 mg/kg (Rat)	Non-toxic at use-dilution.
Primary irritant effect:	
• on the skin:	
Caustic effect on skin and mucous membranes.	Non-hazardous at use-dilution.
• on the eye:	
Strong irritant with the danger of severe eye injury.	Non-hazardous at use-dilution.
Sensitization: No sensitizing effects known.	No sensitizing effects known.
Additional toxicological information:	
The product shows the following dangers according to the calc Classification Guidelines for Preparations as issued in the late	
Harmful Corrosive Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.	Not classified No known significant effects or critical hazards.
Acute effects (acute toxicity, irritation and corrosivity):	
Danger through skin absorption.	Non-hazardous at use-dilution.
Carcinogenic categories	
NTP (National Toxicology Program)	Not applicable.
None of the ingredients is listed.	
12 Ecological information	
 12.1 Toxicity Aquatic toxicity: Toxic for aquatic organisms 12.2 Persistence and degradability The product is partially bio 12.3 Bioaccumulative potential No further relevant information 12.4 Mobility in soil No further relevant information available. Ecotoxical effects: Remark: Inhibition of the development of the biomass Toxic for algae Additional ecological information: General notes: Water Hazard Class (Self-classification) in the concentrate. This statement was deduced from the properties of the single co Water hazard class 2 (German Regulation) (Self-assessment): f Do not allow product to reach ground water, water course or sev Must not reach sewage water or drainage ditch undiluted or upp 	omponents. hazardous for water wage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized. Danger to drinking water if even small quantities leak into the ground.

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- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods	
Product as SOLD	Product at USE DILUTION
Recommendation	
Must not be disposed together with household garbage. Do not allow product to reach sewage system. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.	Diluted product can be flushed to sanitary sewer. Discard empty container in trash.
Uncleaned packaging:	
 Recommendation: Disposal must be made according to official regulations. 	Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

14 Transport information	
Product as SOLD	
• 14.1 UN-Number • DOT, ADR, ADN, IMDG, IATA	UN1903
• 14.2 UN proper shipping name • DOT (ST-2145, ST-2146)	UN1903, disinfectants, liquid, corrosive, n.o.s. (quaternary ammonium compound), 8, PG III
• DOT (ST-756, ST-757, ST-758, ST-760)	UN1903, disinfectants, liquid, corrosive, n.o.s. (quaternary ammonium compound), 8, PG III, LTD. QTY.
• ADR	UN1903, disinfectants, liquid, corrosive, n.o.s. (quaternary ammonium compound), 8, PG III
• IMDG, IATA	UN1903, disinfectants, liquid, corrosive, n.o.s. (quaternary ammonium compound), 8, PG III
• 14.3 Transport hazard class(es) This product can ship as Limited Quantity if packaged in ≤1.3 gallons (5 Liter) containers (Non Hazardous)	
• DOT (ST-756, ST-757, ST-758, ST-760)	
\diamond	
• Class • Label	N/A LTD. QTY.

Trade name: Mark E II (Contd. from page 10) • ADR (ST-2145, ST-2146) 8 (C9) Corrosive substances. Class 8 Label • IMDG, IATA (ST-2145, ST-2146) 8 Corrosive substances. Class 8 Label • 14.4 Packing group DOT, ADR, IMDG, IATA Ш • 14.5 Environmental hazards: Marine pollutant: No 14.6 Special precautions for user Warning: Corrosive Substances Danger Code: 80 • EMS Number F-A,S-B • 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. • Transport/Additional information: • ADR Limited quantities (LQ) 1L 3 Transport category • Tunnel restriction code Е • UN "Model Regulation": (ST-756, ST-757, ST-758, UN1903, disinfectants, liquid, corrosive, n.o.s. (guaternary ST-760) ammonium compound), 8, PG III, LTD. QTY. • UN "Model Regulation": (ST-2145, ST-2146) UN1903, disinfectants, liquid, corrosive, n.o.s. (quaternary ammonium compound), 8, PG III Product at USE DILUTION Not intended for transport.

15 Regulatory information

• 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

United States (USA)

• SARA

Product as SOLD	Product at USE DILUTION	
Section 355 (extremely hazardous substances):		
None of the ingredients is listed.	Not applicable.	
Section 313 (Specific toxic chemical listings):		
None of the ingredients is listed.	None of the ingredients is listed.	

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Trade name: Mark E II

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	Product as SOLD		Product at USE DILUTION
• TSCA (Toxic	Substances Control Act):		
All ingredients are listed.		All ingredients are listed.	
Proposition 6	5 (California):		
Chemicals kr	nown to cause cancer:		
None of the ingredients is listed.		None of the ingredients is listed.	
Chemicals kr	nown to cause reproductive toxicity for fe	males:	
None of the ingredients is listed.		None of the ingredients is listed.	
Chemicals kr	nown to cause reproductive toxicity for ma	ales:	
None of the ingredients is listed.		None of the ingredients is listed.	
	nown to cause developmental toxicity:		
Ethanol - listing consumption ar	refers specifically to alcoholic beverage ad is not applicable for product.		None of the ingredients is listed.
64-17-5	ethanol		
Carcinogenic	Categories		
• EPA (Environ	mental Protection Agency)		
None of the in	gredients is listed.		None of the ingredients is listed.
• IARC (Interna	tional Agency for Research on Cancer)		
64-17-5	ethanol	1	None of the ingredients is listed.
• TLV (Thresho	Id Limit Value established by ACGIH)		
64-17-5	ethanol	A3	None of the ingredients is listed.
• NIOSH-Ca (N	ational Institute for Occupational Safety a	nd Healt	 h)
None of the ingredients is listed.		None of the ingredients is listed.	
	ccupational Safety & Health Administratio	n)	
		n)	All ingredients are listed.
• OSHA-Ca (Oc		n)	All ingredients are listed.
• OSHA-Ca (Oo All ingredients • Canada		n)	All ingredients are listed.
• OSHA-Ca (Oo All ingredients • Canada	s are listed. mestic Substances List (DSL)	n)	All ingredients are listed. All ingredients are listed.
OSHA-Ca (Oc All ingredients Canada Canadian Do All ingredients	s are listed. mestic Substances List (DSL)	n)	
OSHA-Ca (Oc All ingredients Canada Canadian Do All ingredients	s are listed. mestic Substances List (DSL) s are listed.	n)	
OSHA-Ca (Oc All ingredients Canada Canadian Do All ingredients Canadian Ing 64-17-5	s are listed. mestic Substances List (DSL) s are listed. redient Disclosure list (limit 0.1%)	n)	All ingredients are listed.

Trade name: Mark E II

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	(Conta. nom page 1
16 Other information	
This information is based on our present knowledge. However features and shall not establish a legally valid contractual relat	
• Relevant phrasesH225Highly flammable liquid and vapour.H226Flammable liquid and vapour.H302Harmful if swallowed.H312Harmful in contact with skin.H314Causes severe skin burns and eye damage.H315Causes serious eye damage.H318Causes serious eye damage.H335May cause respiratory irritation.	
R22Harmful if swallowed.R34Causes burns.R41Risk of serious damage to eyes.	
Product as SOLD	Product at USE DILUTION
Hazardous Material Information System (U.S.A.)	
Health 2 Flammability 0 Physical hazards 0 4=Very High; 3=High; 2=Moderate; 1=Slight; 0=Insignificant • NFPA ratings (scale 0 - 4)	Health 1 Flammability 0 Physical hazards 0 4=Very High; 3=High; 2=Moderate; 1=Slight; 0=Insignificant
Health = 2 2 0 Fire = 0 Reactivity = 0	Health = 1 Fire = 0 Reactivity = 0
 MSDS File Name: SL45 Mark E II SDS Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Rou Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport dssociation GHS: Globally Harmonized System of Classification and Labeling of Chemicals ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) DNEL: Derived No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent BSDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com Revision:04/14/2015 Steams Packaging Corporation makes no warranty, representation or guarantee as to the acc to determine the safety, toxicly and suitability of his own use, handling and disposal of this opp made by Steams Packaging Corporation as to the effects of such use, the results to be obtair any liability arising out of the use by others of this product referred to herein. The data in this nation with any other material or in any process. Steams Packaging Corporation does.out re <td></td>	