



MURSATT CHEMICALS LIMITED
11 REGALCREST COURT
WOODBIDGE, ONTARIO, CANADA, L4L 8P3
(905)-850-8444

PRODUCT: LIQUID SHOCK

CODE: MUR0050

SECTION 01: IDENTIFICATION

PRODUCT CODE..... MUR0050
 PRODUCT IDENTIFIER..... LIQUID SHOCK
 OTHER MEANS OF IDENTIFICATION..... N.A.V.
 RECOMMENDED USE AND WATER PURIFICATION, BLEACHING AGENT AND DISINFECTANT.
 RESTRICTIONS ON USE
 SUPPLIER IDENTIFIER..... MURSATT CHEMICALS LIMITED
 11 REGALCREST COURT
 WOODBRIDGE, ONTARIO
 CANADA
 L4L 8P3
 EMERGENCY PHONE NO..... CANUTEC (613)-996-6666.

SECTION 02: HAZARD IDENTIFICATION



HAZARD CLASSIFICATION..... SKIN CORROSION - CATEGORY 1B. SERIOUS EYE DAMAGE - CATEGORY 1. ACUTE AQUATIC TOXICITY - CATEGORY 1.
 SIGNAL WORD..... DANGER.
 HAZARD STATEMENT..... H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. H400 VERY TOXIC TO AQUATIC LIFE.
 PRECAUTIONARY STATEMENT..... P264 WASH SKIN THOROUGHLY AFTER HANDLING. P273 AVOID RELEASE TO THE ENVIRONMENT. P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION. P301+P330+P331 IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING. P303+P361+P353 IF ON SKIN (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER. P304+P340+P310 IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. P305+P351+P338+P310 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. P363 WASH CONTAMINATED CLOTHING BEFORE REUSE. P391 COLLECT SPILLAGE. P405 STORE LOCKED UP. P501 DISPOSE OF CONTENTS/CONTAINER TO APPROPRIATE WASTE SITE OR RECLAIMER IN ACCORDANCE WITH LOCAL AND NATIONAL REGULATIONS.
 OTHER HAZARDS..... NONE.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	CAS #	WT. %
SODIUM HYPOCHLORITE	7681-52-9	7-13

SECTION 04: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES:
 INHALATION..... IF INHALED, REMOVE VICTIM TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION ONLY IF BREATHING HAS STOPPED. DO NOT USE MOUTH-TO-MOUTH IF VICTIM INGESTED OR INHALED THE SUBSTANCE. INDUCE ARTIFICIAL RESPIRATION WITH THE AID OF A POCKET MASK EQUIPPED WITH A ONE-WAY VALVE OR OTHER APPROPRIATE RESPIRATORY MEDICAL DEVICE. IF SYMPTOMS PERSIST, CALL A PHYSICIAN.
 SKIN CONTACT..... REMOVE CONTAMINATED CLOTHING AND IMMEDIATELY FLUSH WITH RUNNING WATER FOR A MINIMUM OF 15 MINUTES. IF IRRITATION PERSISTS, REPEAT FLUSHING. DISCARD HEAVILY CONTAMINATED CLOTHING AND SHOES IN A MANNER WHICH LIMITS FURTHER EXPOSURE. OTHERWISE, WASH CLOTHING SEPARATELY BEFORE REUSE. CALL A PHYSICIAN IF IRRITATION DEVELOPS.

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SECTION 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

APPROPRIATE ENGINEERING CONTROLS	USE LOCAL EXHAUST VENTILATION TO MAINTAIN LEVELS BELOW THE PEL. VENTILATE STORAGE TANK OUTSIDE. LOCAL EXHAUST VENTILATION SHOULD BE APPLIED WHEREVER THERE IS AN INCIDENCE OF POINT SURFACE EMISSIONS OR DISPERSION OF REGULATED CONTAMINANTS IN THE WORK AREA. SMOKING SHOULD BE PROHIBITED IN AREAS IN WHICH SODIUM HYPOCHLORITE IS STORED OR HANDLED.
INDIVIDUAL PROTECTION MEASURE SUCH AS PERSONAL PROTECTIVE EQUIPMENTS:	
HAND PROTECTION.....	WEAR CHEMICAL OR RUBBER GLOVES.
RESPIRATORY PROTECTION.....	NIOSH/MSHA APPROVED AIR-PURIFYING RESPIRATOR EQUIPPED WITH ACID MIST CARTRIDGES FOR CONCENTRATIONS UP TO 10 TIMES THE TLV. USE A SUPPLIED AIR RESPIRATOR IF CONCENTRATIONS ARE HIGHER OR UNKNOWN.
EYE PROTECTION.....	USE CHEMICAL SAFETY GOGGLES AND FACE-SHIELD WHEN THERE IS POTENTIAL FOR EYE CONTACT.
PROTECTIVE CLOTHING.....	RUBBER APRON, LAB COAT, RAIN JACKET, PANTS OR OVERALLS AS APPROPRIATE.
PROTECTIVE FOOTWEAR.....	NEOPRENE OR RUBBER BOOTS.
OTHER.....	EYEWASH STATION AND SAFETY SHOWER SHOULD BE MADE AVAILABLE IN THE IMMEDIATE WORKING AREA.
HYGIENIC PRACTICES.....	USE GOOD PERSONAL HYGIENE PRACTICES. WASH HANDS BEFORE EATING, DRINKING, OR SMOKING, OR USING TOILET FACILITIES. PROMPTLY REMOVE CONTAMINATED CLOTHING AND WASH THOROUGHLY BEFORE REUSE.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE.....	LIQUID.
COLOR.....	GREENISH-YELLOW SOLUTION.
ODOUR.....	CHLORINE LIKE, PUNGENT.
ODOUR THRESHOLD.....	N.A.V.
PH.....	12 - 14.
MELTING/FREEZING POINT.....	-20 C.
BOILING POINT.....	DECOMPOSES ON HEATING.
FLASH POINT (C), METHOD.....	NONE.
EVAPORATION RATE.....	N.A.V.
FLAMMABILITY (SOLIDS AND GASES).....	N.A.V.
UPPER FLAMMABLE LIMIT (% BY VOL.)...	N.A.P.
LOWER FLAMMABLE LIMIT (% BY VOL.)...	N.A.P.
VAPOUR PRESSURE (MMHG).....	20. (@ 20 C).
VAPOUR DENSITY (AIR=1).....	N.A.V.
RELATIVE DENSITY.....	1.168.
SOLUBILITY IN WATER (% W/W).....	MISCIBLE.
COEFFICIENT OF WATER/OIL DIST.....	N.A.V.
AUTO IGNITION TEMPERATURE.....	N.A.V.
DECOMPOSITION TEMPERATURE.....	N.A.V.
VISCOSITY.....	N.A.V.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:.....	STABLE AT ROOM TEMPERATURE. UNSTABLE ABOVE 40 C, SUNLIGHT AND CONTACT WITH METALS.
CHEMICAL STABILITY:.....	STABLE AT ROOM TEMPERATURE.
POSSIBILITY OF HAZARDOUS REACTIONS:.....	MAY DEVELOP CHLORINE IF MIXED WITH ACIDIC SOLUTIONS.
REACTIONS:.....	
CONDITIONS TO AVOID.....	KEEP AWAY FROM HIGH HEAT AND SUNLIGHT OR ULTRA-VIOLENT LIGHT. DO NOT STORE ABOVE 30°C. DO NOT ALLOW SOLUTIONS TO EVAPORATE DRY. KEEP AWAY FROM INCOMPATIBLES.
INCOMPATIBLE MATERIALS:.....	MAY REACT VIOLENTLY WITH STRONG ACIDS PRODUCING CHLORINE GAS, WHICH IS TOXIC. OTHER INCOMPATIBLES INCLUDE ORGANIC MATERIAL, CELLULOSE, OXIDIZABLE MATERIALS, AMMONIA, UREA, AMMONIUM SALTS, ETHYLENEIMINE, CYANIDES, NITROGEN COMPOUNDS, ALCOHOLS, METALS, AND METAL OXIDES. REACTS WITH METALS TO PRODUCE FLAMMABLE HYDROGEN GAS.
HAZARDOUS PRODUCTS OF DECOMPOSITION.....	CHLORINE GAS. THERMAL DECOMPOSITION: CHLORINE, SODIUM OXIDE, OXYGEN, OXIDES OF CHLORINE, SODIUM CHLORATE AND HYDROGEN.

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SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
SODIUM HYPOCHLORITE	N.AV.	3-5 G/KG (ORAL, RAT)
INFORMATION ON LIKELY ROUTES OF ENTRY:		
INHALATION.....	MIST CAN IRRITATE THE NOSE AND THROAT. FUMES MAY IRRITATE MUCOUS MEMBRANES AND CAUSE COUGHING OR PULMONARY EDEMA. EXPOSURE TO HIGH LEVELS OF CHLORINE GAS MAY RESULT IN SEVERE LUNG DAMAGE.	
SKIN CONTACT.....	WILL CAUSE MODERATE IRRITATION TO SKIN. CAN CAUSE BURNS AND BLISTERS.	
SKIN ABSORPTION.....	PROLONGED REPEATED SKIN CONTACT WITH SOLUTIONS CONTAINING AS LITTLE AS 4-6% SODIUM HYPOCHLORITE CAN CAUSE ALLERGIC CONTACT DERMATITIS. SYMPTOMS INCLUDE CHRONIC, ITCHY ECZEMA.	
EYE CONTACT.....	CAN CAUSE IRRITATION, SEVERE BURNS AND CORNEAL DAMAGE, WHICH MAY RESULT IN BLINDNESS.	
INGESTION.....	IF INGESTED, PRODUCT WILL CAUSE MEMBRANE IRRITATION AND PAIN AND INFLAMMATION TO DIGESTIVE TRACT. COULD CAUSE VOMITING AND SHOCK. HYPOCHLORITE SOLUTIONS RELEASE HYPOCHLOROUS ACID ON CONTACT WITH GASTRIC JUICES, AND INGESTION MAY ALSO CAUSE EDEMA OF THE PHARYNX AND LARYNX; REDUCED BLOOD PRESSURE, DELIRIUM AND COMA MAY OCCUR.	
EFFECTS OF ACUTE EXPOSURE.....	SEE ABOVE.	
EFFECTS OF CHRONIC EXPOSURE.....	PROLONGED OR REPEATED CONTACT WITH DILUTE SOLUTIONS MAY BLEACH SKIN OR CAUSE DERMATITIS.	
SIGNS AND SYMPTOMS OF OVEREXPOSURE		
CARCINOGENICITY OF MATERIAL.....	IARC: NOT LISTED.	
TERATOGENICITY.....	N.AV.	
MUTAGENICITY.....	N.AV.	
REPRODUCTIVE EFFECTS.....	N.AV.	
SENSITIZING CAPABILITY OF MATERIAL.....	N.AV.	
SYNERGISTIC MATERIALS.....	N.AV.	

SECTION 12: ECOLOGICAL CONSIDERATIONS

ECOTOXICITY.....	N.AV.
PERSISTENCE AND DEGRADATION.....	N.AV.
BIOACCUMULATIVE POTENTIAL.....	N.AV.
MOBILITY IN SOIL.....	N.AV.
OTHER ADVERSE EFFECTS.....	N.AV.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS:..... DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER.....	1791.
PROPER SHIPPING NAME.....	HYPOCHLORITE SOLUTIONS.
TDG CLASSIFICATION.....	8.
PACKING GROUP.....	III.
ENVIRONMENTAL HAZARDS ACCORDING TO THE INTERNATIONAL MARITIME DANGEROUS GOODS CODE AND THE UNITED NATIONS MODEL REGULATIONS:	
SPECIAL PRECAUTIONS IN CONNECTION WITH TRANSPORT OR CONVEYANCE EITHER WITHIN OR OUTSIDE THE PREMISES:	N.AV.

SECTION 15: REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS SPECIFIC TO THE PRODUCT: N.AV.

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SECTION 16: OTHER INFORMATION

N.AV.=NOT AVAILABLE
N.AP.=NOT APPLICABLE

OTHER INFORMATION.....

THE DATA IN THIS MSDS RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS. THIS DATA IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS PRODUCT SPECIFICATIONS. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.

PREPARED BY.....
PREPARATION DATE.....

REGULATORY AFFAIRS
APR 18/2017