



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

PRODUCT: BROME-OX

CODE: MUR0003

SECTION 01: IDENTIFICATION

PRODUCT CODE..... MUR0003
 PRODUCT IDENTIFIER..... BROME-OX
 OTHER MEANS OF IDENTIFICATION..... N.AV.
 RECOMMENDED USE AND N.AV.
 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..... ACUTE TOXICITY (ORAL) - CATEGORY 4. SKIN CORROSION - CATEGORY 1B.
 SERIOUS EYE DAMAGE - CATEGORY 1.
 SIGNAL WORD..... DANGER.
 HAZARD STATEMENT..... H302 HARMFUL IF SWALLOWED. H314 CAUSES SEVERE SKIN BURNS AND EYE
 DAMAGE.
 PRECAUTIONARY STATEMENT..... P264 WASH SKIN THOROUGHLY AFTER HANDLING. P270 DO NOT EAT, DRINK OR
 SMOKE WHEN USING THIS PRODUCT. P301+P312+P330 IF SWALLOWED: CALL A
 POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL. RINSE MOUTH.
 P260 DO NOT BREATHE DUST/FUME/GAS/MIST/VAPOURS/SPRAY. P280 WEAR
 PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE
 PROTECTION. P301+P330+P331 IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE
 VOMITING. P363 WASH CONTAMINATED CLOTHING BEFORE REUSE.
 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. P321 SPECIFIC TREATMENT (SEE
 SUPPLEMENTAL FIRST AID INSTRUCTIONS ON THE SAFETY DATA SHEET).
 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. 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. %
PENTAPOTASSIUM BIS(PEROXYMONOSULPHATE) BIS(SULPHATE)	70693-62-8	60-100
DIPOTASSIUM PEROXODISULPHATE	7727-21-1	0-5
TETRA[CARBONATO(2-)]DIHYDROXYPENTAMAGNESIUM	7760-50-1	<2
SODIUM CARBONATE	497-19-8	10-30
SODIUM SULPHATE	7757-82-6	10-30

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SECTION 04: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES:

EYE CONTACT.....	RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
SKIN CONTACT.....	IF ON SKIN, RINSE WELL WITH WATER. TAKE OFF CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. IF SKIN IRRITATION PERSISTS, CALL A PHYSICIAN. WASH CONTAMINATED CLOTHING BEFORE RE-USE.
INHALATION.....	MOVE TO FRESH AIR. OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED. CALL A PHYSICIAN IMMEDIATELY.
INGESTION.....	DO NOT INDUCE VOMITING. DRINK 1 OR 2 GLASSES OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CALL A PHYSICIAN IMMEDIATELY.
MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE OR DELAYED:	SEE SECTION 11.
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED	N.A.V.

SECTION 05: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA.....	USE EXTINGUISHING MEASURES THAT ARE APPROPRIATE TO LOCAL CIRCUMSTANCES AND THE SURROUNDING ENVIRONMENT.
UNSUITABLE EXTINGUISHING MEDIA.....	CARBON DIOXIDE (CO2).
SPECIAL HAZARDS ARISING FROM THE PRODUCT:	THE PRODUCT ITSELF DOES NOT BURN.
HAZARDOUS COMBUSTION PRODUCTS.	HAZARDOUS DECOMPOSITION PRODUCTS OXYGEN, SULPHUR DIOXIDE, SULPHUR TRIOXIDE. OXIDES OF CARBON. OXIDES OF SULPHUR. SODIUM OXIDE.
SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS:	WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE SUIT.

SECTION 06: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS.....	EVACUATE PERSONNEL TO SAFE AREAS. USE PERSONAL PROTECTIVE EQUIPMENT.
ENVIRONMENTAL PRECAUTIONS.....	DO NOT ALLOW TO ENTER DRAINS, SEWERS OR WATERCOURSES.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	SWEEP UP AND SHOVEL INTO SUITABLE CONTAINERS FOR DISPOSAL. AVOID DUST FORMATION. AFTER CLEANING, FLUSH AWAY TRACES WITH WATER.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:.....	USE ONLY IN WELL-VENTILATED AREAS. DO NOT BREATHE DUST. AVOID DUST FORMATION IN CONFINED AREAS. AVOID CONTACT WITH SKIN AND EYES. KEEP AWAY FROM HEAT AND FLAME. WASH HANDS BEFORE BREAKS AND IMMEDIATELY AFTER HANDLING THE PRODUCT. HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:	KEEP CONTAINERS TIGHTLY CLOSED IN A DRY, COOL AND WELL-VENTILATED PLACE. PROTECT FROM CONTAMINATION. STORE IN ORIGINAL CONTAINER. KEEP AWAY FROM COMBUSTIBLE MATERIAL. NEVER ALLOW PRODUCT TO GET IN CONTACT WITH WATER DURING STORAGE. STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

SECTION 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL	NIOSH
PENTAPOTASSIUM BIS(PEROXYMONOSULPHATE) BIS(SULPHATE)	N.A.V.	N.A.V.	N.A.V.	N.A.V.	N.A.V.	N.A.V.
DIPOTASSIUM PEROXODISULPHATE	0.1 MG/M3 AS PERSULPHATE	N.A.V.	N.A.V.	N.A.V.	N.A.V.	N.A.V.
TETRA[CARBONATO(2-)]DIHYDROXYPENTAMAGNESIUM	N.A.V.	N.A.V.	N.A.V.	N.A.V.	N.A.V.	N.A.V.
SODIUM CARBONATE	N.A.V.	N.A.V.	N.A.V.	N.A.V.	N.A.V.	N.A.V.
SODIUM SULPHATE	N.A.V.	N.A.V.	N.A.V.	N.A.V.	N.A.V.	N.A.V.

APPROPRIATE ENGINEERING CONTROLS ENSURE ADEQUATE VENTILATION.

PRODUCT: BROME-OX

CODE: MUR0003

SECTION 08: EXPOSURE CONTROLS AND PERSONAL PROTECTIONINDIVIDUAL PROTECTION MEASURE
SUCH AS PERSONAL PROTECTIVE
EQUIPMENTS:

HAND PROTECTION.....	IMPERVIOUS GLOVES.
RESPIRATORY PROTECTION.....	WHEN WORKERS ARE FACING CONCENTRATIONS ABOVE THE EXPOSURE LIMIT THEY MUST USE APPROPRIATE CERTIFIED RESPIRATORS. WEAR A POSITIVE-PRESSURE SUPPLIED-AIR RESPIRATOR.
EYE PROTECTION.....	WEAR SAFETY GLASSES OR COVERALL CHEMICAL SPLASH GOGGLES.
PROTECTIVE CLOTHING.....	APPROPRIATE IMPERVIOUS APRON, PANTS, JACKET, HOOD .
PROTECTIVE FOOTWEAR.....	IMPERMEABLE BOOTS.
OTHER.....	ENSURE THAT EYEWASH STATIONS AND SAFETY SHOWERS ARE CLOSE TO THE WORKSTATION LOCATION.
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.....	SOLID. GRANULAR.
COLOR.....	WHITE.
ODOUR.....	ODOURLESS.
ODOUR THRESHOLD.....	N.AV.
PH.....	4.5 (1% SOLUTION).
MELTING POINT (C).....	N.AV.
BOILING POINT.....	N.AP.
FLASH POINT (C), METHOD.....	N.AP.
EVAPORATION RATE.....	N.AV.
FLAMMABILITY (SOLIDS AND GASES).....	N.AV.
UPPER FLAMMABLE LIMIT (% BY VOL.)...	N.AP.
LOWER FLAMMABLE LIMIT (% BY VOL.)...	N.AP.
VAPOUR PRESSURE (MMHG).....	N.AP.
VAPOUR DENSITY (AIR=1).....	N.AP.
RELATIVE DENSITY.....	1.3.
SOLUBILITY IN WATER (% W/W).....	N.AV.
COEFFICIENT OF WATER/OIL DIST.....	N.AV.
AUTO IGNITION TEMPERATURE.....	N.AV.
DECOMPOSITION TEMPERATURE.....	N.AV.
VISCOSITY.....	N.AP.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:.....	STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
CHEMICAL STABILITY:.....	STABLE UNDER NORMAL CONDITIONS.
POSSIBILITY OF HAZARDOUS	N.AV.
REACTIONS:	
CONDITIONS TO AVOID.....	TEMPERATURE > 50 C (> 122 F). AVOID EXTREME HEAT.
INCOMPATIBLE MATERIALS:.....	HALOGENATED COMPOUNDS CYANIDES, HEAVY METAL SALTS, COMBUSTIBLES.
HAZARDOUS PRODUCTS OF	OXYGEN, SULFUR DIOXIDE, SULFUR TRIOXIDE.
DECOMPOSITION	

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
PENTAPOTASSIUM BIS(PEROXYMONOSULPHATE) BIS(SULPHATE)	N.AV.	500 MG/KG (ORAL, RAT)
DIPOTASSIUM PEROXODISULPHATE	N.AV.	1130 MG/KG (ORAL, RAT)
TETRA[CARBONATO(2-)]DIHYDROXPENTAMAGNESIUM	N.AV.	> 2,000 MG/KG (ORAL, RAT)
SODIUM CARBONATE	2300 MG/M3 (IHL, RAT) - 2H	4090 MG/KG (ORAL, RAT); 2210 MG/KG (DERMAL, MOUSE)
SODIUM SULPHATE	N.AV.	5989 MG/KG)ORAL, RAT)
INFORMATION ON LIKELY ROUTES OF ENTRY:		
SKIN CONTACT.....	CAUSES BURNS. RABBIT.	
SKIN ABSORPTION.....	N.AV.	
EYE CONTACT.....	SEVERE EYE IRRITATION (RABBIT).	
INHALATION.....	N.AV.	

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SECTION 11: TOXICOLOGICAL INFORMATION

INGESTION..... HARMFUL IF SWALLOWED.
 EFFECTS OF ACUTE EXPOSURE..... SEE ABOVE.
 EFFECTS OF CHRONIC EXPOSURE..... N.AV.
 SIGNS AND SYMPTOMS OF
 OVEREXPOSURE
 CARCINOGENICITY OF MATERIAL..... NONE OF THE COMPONENTS PRESENT IN THIS MATERIAL AT CONCENTRATIONS
 EQUAL TO OR GREATER THAN 0.1% ARE LISTED BY IARC, NTP, OSHA OR ACGIH
 AS A CARCINOGEN.
 TERATOGENICITY..... N.AV.
 MUTAGENICITY..... N.AV.
 REPRODUCTIVE EFFECTS..... N.AV.
 SENSITIZING CAPABILITY OF MATERIAL DID NOT CAUSE SENSITIZATION ON LABORATORY ANIMALS., GUINEA PIG.
 SYNERGISTIC MATERIALS..... N.AV.
 LD 50 OF MATERIAL, SPECIES & ROUTE. > 2,000 MG/KG (DERMAL, RAT).
 LC 50 OF MATERIAL, SPECIES & ROUTE. INHALATION 4 HOUR LC50: > 5 MG/L IN RATS.

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..... 3260.
 PROPER SHIPPING NAME..... CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (MONOPERSULFATE COMPOUND).
 TDG CLASSIFICATION..... 8.
 PACKING GROUP..... II.
 ENVIRONMENTAL HAZARDS ACCORDING TO THE INTERNATIONAL MARITIME DANGEROUS GOODS CODE AND THE UNITED NATIONS MODEL REGULATIONS: N.AV.
 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.

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..... REGULATORY AFFAIRS
 PREPARATION DATE..... APR 18/2017