

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

PRODUCT: BROM-N-8 TABLETS CODE: MUR0018

SECTION 01: IDENTIFICATION

PRODUCT CODE......PRODUCT IDENTIFIER.....

OTHER MEANS OF IDENTIFICATION.......

RESTRICTIONS ON USE SUPPLIER IDENTIFIER.....

MUR0018

BROM-N-8 TABLETS

N.AV.

SWIMMING POOL PRODUCT. SPA PRODUCT.

MURSATT CHEMICALS LIMITED 11 REGALCREST COURT WOODBRIDGE, ONTARIO CANADA

L4L 8P3

EMERGENCY PHONE NO...... CANUTEC (613)-996-6666.

SECTION 02: HAZARD IDENTIFICATION



HAZARD CLASSIFICATION.....

SIGNAL WORD.....HAZARD STATEMENT.....

PRECAUTIONARY STATEMENT.....

ACUTE TOXICITY (ORAL) - CATEGORY 4. SKIN CORROSION — CATEGORY 1. SERIOUS EYE DAMAGE - CATEGORY 1. OXIDIZING SOLIDS - CATEGORY 2. DANGER.

H272 MAY INTENSIFY FIRE; OXIDIZER. H302 HARMFUL IF SWALLOWED. H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. – NO SMOKING. P220 KEEP/STORE AWAY FROM CLOTHING/COMBUSTIBLE MATERIALS.

P221 TAKE ANY PRECAUTION TO AVOID MIXING WITH COMBUSTIBLES.... P270 DO NO EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. P301+P312 IF SWALLOWED: CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL. P301+P330+P331 IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING. P370+P378 IN CASE OF FIRE: USE ONLY WATER FOR EXTINCTION. P260 DO NOT BREATHE DUST/FUME/GAS/MIST/VAPOURS/SPRAY. P264 WASH SKIN THOROUGHLY AFTER HANDLING. P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION. P363 WASH CONTAMINATED CLOTHING BEFORE REUSE. P304+P340 IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. P310 IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. P321 SPECIFIC TREATMENT (SEE SUPPLEMENTAL FIRST AID INSTRUCTIONS ON THE SAFETY DATA SHEET). P305+P351+P338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO.

CONTINUE RINSING. P405 STORE LOCKED UP. P501 DISPOSE OF CONTENTS/CONTAINER TO APPROPRIATE WASTE SITE OR RECLAIMER IN

ACCORDANCE WITH LOCAL AND NATIONAL REGULATIONS.

NONE.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS

CAS # WT. %

1-BROMO-3-CHLORO-5,5-DIMETHYLIMIDAZOLIDINE-2,4-DIONE 16079-88-2 96

SECTION 04: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES:

OTHER HAZARDS.....

EYE CONTACT.....

IMMEDIATELY FLUSH WITH PLENTY OF WATER. AFTER INITIAL FLUSHING, REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. KEEP EYE WIDE OPEN WHILE RINSING. IF SYMPTOMS PERSIST, CALL A

PHYSICIAN SKIN CONTACT...... REMOVE CO

REMOVE CONTAMINATED CLOTHING AND SHOES. RINSE IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN OR POISON

CONTROL CENTRE IMMEDIATELY.

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SECTION 04: FIRST AID MEASURES

REMOVE TO FRESH AIR. IF BREATHING IS IRREGULAR OR STOPPED, ADMINISTER INHALATION.....

ARTIFICIAL RESPIRATION. AVOID DIRECT CONTACT WITH SKIN. USE BARRIER TO

GIVE MOUTH-TO-MOUTH RESUSCITATION. CALL A PHYSICIAN. CALL A PHYSICIAN IMMEDIATELY. DO NOT INDUCE VOMITING. NEVER GIVE INGESTION.....

ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. HAVE PERSON SIP A

GLASS OF WATER IF ABLE TO SWALLOW.

MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE OR DELAYED: SEE SECTION 11.

INDICATION OF ANY IMMEDIATE MEDICAL NOTE TO PHYSICIANS: TREAT SYMPTOMATICALLY. PROBABLE MUCOSAL

ATTENTION AND SPECIAL TREATMENT DAMAGE MAY CONTRAINDICATE THE USE OF GASTRIC LAVAGE.

NEEDED

SECTION 05: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA...... FLOOD FIRE AREA WITH WATER FROM A DISTANCE

UNSUITABLE EXTINGUISHING MEDIA..... DO NOT USE DRY CHEMICALS, CARBON DIOXIDE, OR HALOGENATED

EXTINGUISHING AGENTS.

DO NOT LET THE FIRE BURN.

SPECIAL HAZARDS ARISING FROM THE PRODUCT:

HAZARDOUS COMBUSTION PRODUCTS.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS:

SEE HAZARDOUS DECOMPOSITION PRODUCTS.

AS IN ANY FIRE, WEAR A SELF-CONTAINED BREATHING APPARATUS IN PRESSURE-DEMAND, MSHA/NIOSH (APPROVED OR EQUIVALENT), AND FULL

PROTECTIVE GEAR.

SECTION 06: ACCIDENTAL RELEASE MEASURES

AVOID CONTACT WITH SKIN, EYES OR CLOTHING. USE PERSONAL PROTECTIVE PERSONAL PRECAUTIONS..... EQUIPMENT AS REQUIRED. ENSURE ADEQUATE VENTILATION, ESPECIALLY IN

CONFINED AREAS.

PREVENT ENTRY INTO WATERWAYS, SEWERS, BASEMENTS OR CONFINED ENVIRONMENTAL PRECAUTIONS.....

AREAS. DO NOT FLUSH INTO SURFACE WATER OR SANITARY SEWER SYSTEM.

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. COVER POWDER METHODS AND MATERIALS FOR .

SPILL WITH PLASTIC SHEET OR TARP TO MINIMIZE SPREADING AND KEEP CONTAINMENT AND CLEANING UP

POWDER DRY. DO NOT ADD WATER TO SPILLED MATERIAL. USING CLEAN

DEDICATED EQUIPMENT, SWEEP AND SCOOP ALL SPILLED

MATERIAL, CONTAMINATED SOIL, AND OTHER CONTAMINATED MATERIAL AND PLACE INTO CLEAN DRY CONTAINERS FOR DISPOSAL. DO NOT CLOSE CONTAINERS CONTAINING WET OR DAMP MATERIAL. THEY SHOULD BE LEFT OPEN TO DISPERSE ANY HAZARDOUS GASES THAT MAY FORM. USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED. COVER POWDER SPILL WITH PLASTIC SHEET OR TARP TO MINIMIZE SPREADING AND KEEP POWDER DRY.TAKE UP MECHANICALLY, PLACING IN APPROPRIATE CONTAINERS FOR DISPOSAL. AVOID CREATING DUST CLEAN CONTAMINATED SURFACE THOROUGHLY. PICK UP AND

TRANSFER TO PROPERLY LABELED CONTAINERS. SWEEP UP AND SHOVEL INTO SUITABLE CONTAINERS FOR DISPOSAL. AFTER CLEANING, FLUSH AWAY TRACES WITH WATER. DO NOT USE FLOOR SWEEPING COMPOUNDS TO CLEAN UP

SPILLS, DO NOT TRANSPORT WET OR DAMP MATERIAL.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:..... AVOID CONTACT WITH SKIN, EYES OR CLOTHING. USE PERSONAL PROTECTIVE

EQUIPMENT AS REQUIRED. WASH CONTAMINATED CLOTHING BEFORE REUSE. DO NOT BREATHE DUST/FUME/GAS/MIST/VAPORS/SPRAY. DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. USE WITH LOCAL EXHAUST VENTILATION. DO NOT MIX WITH OTHER CHEMICALS. KEEP/STORE AWAY FROM CLOTHING/ COMBUSTIBLE MATERIALS. WASH THOROUGHLY AFTER HANDLING. USE ONLY IN

WELL-VENTILATED AREAS.

CONDITIONS FOR SAFE STORAGE,

KEEP OUT OF THE REACH OF CHILDREN. KEEP CONTAINERS TIGHTLY CLOSED IN INCLUDING ANY IMCOMPATIBILITÉS: A COOL, WELL-VENTILATED PLACE, KEEP IN A DRY PLACE, KEEP IN PROPERLY

LABELED CONTAINERS.

SECTION 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

	ACGIH TLV	OSHA PEL	NIOSH
INGREDIENTS	TWA STEL	PEL STEL	REL

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SECTION 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

INGREDIENTS	ACGIH TLV	OSHA PEL	NIOSH
	TWA STEL	PEL STEL	REL

1-BROMO-3-CHLORO-5, N.AV. N.AV. N.AV. N.AV. N.AV. N.AV.

5-DIMETHYLIMIDAZOLIÓ

INE-2,4-DIONE

APPROPRIATE ENGINEERING CONTROLS USE WITH ADEQUATE VENTILATION. LOCAL EXHAUST AS NEEDED.

INDIVIDUAL PROTECTION MEASURE SUCH AS PERSONAL PROTECTIVE

EQUIPMENTS:

HAND PROTECTION...... WEAR PROTECTIVE GLOVES.

RESPIRATORY PROTECTION...... IF EXPOSURE LIMITS ARE EXCEEDED OR IRRITATION IS EXPERIENCED,
NIOSH/MSHA APPROVED RESPIRATORY PROTECTION SHOULD BE WORN.

POSITIVE-PRESSURE SUPPLIED AIR RESPIRATORS MAY BE REQUIRED FOR HIGH AIRBORNE CONTAMINANT CONCENTRATIONS. RESPIRATORY PROTECTION MUST

BE PROVIDED.

EYE PROTECTION...... WEAR SAFETY GLASSES WITH SIDE SHIELDS (OR GOGGLES). TIGHT SEALING

SAFETY GOGGLES.

PROTECTIVE FOOTWEAR......PROTECTIVE FOOTWEAR.

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 (TABLETS).
COLOR	WHITE.
	CHLORINE, BROMINE.
ODOURODOUR THRESHOLD	N.AV.
PH	4.5 (0.1% SOLUTION IN DI WATER).
FREEZING/MELTING POINT	120 C (248 F).
BOILING POINT	N.AP.
FLASH POINT (C), METHODEVAPORATION RATE	N.AP.
EVAPORATION RATE	N.AP.
FLAMMABILITY (SOLIDS AND GASES)	N.AV.
UPPER FLAMMABLE LIMIT (% BY VOL.) LOWER FLAMMABLE LIMIT (% BY VOL.) VAPOUR PRESSURE (MMHG)	N.AP.
LOWER FLAMMABLE LIMIT (% BY VOL.)	N.AP.
VAPOUR PRESSURE (MMHG)	N.AP.
VAPOUR DENSITY (AIR=1)	N.AP.
RELATIVE DENSITY	0.87 - 0.92.
SOLUBILITY IN WATER (% W/W)	N.AV.
COEFFICIENT OF WATER/OIL DIST AUTO IGNITION TEMPERATURE	N.AP. N.AV.
DECOMPOSITION TEMPERATURE	N.AV.
VISCOSITY	N.AP.
VI3CO3111	N.Ar.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:..... HAZARDOUS POLYMERISATION WILL NOT OCCUR.

CHEMICAL STABILITY:..... STABLE UNDER NORMAL CONDITIONS OF HANDLING AND STORAGE.

POSSIBILITY OF HAZARDOUS NONE UNDER NORMAL PROCESSING.

REACTIONS:

CONDITIONS TO AVOID:...... EXTREMES OF TEMPERATURE AND DIRECT SUNLIGHT. PROTECT FROM

MOISTURE. DO NOT MIX WITH OTHER CHEMICALS.
STRONG ACIDS AND BASES. AMMONIA. CALCIUM F

STRONG ACIDS AND BASES. AMMONIA. CALCIUM HYPOCHLORITE. COMBUSTIBLE MATERIAL. DO NOT MIX WITH OTHER SWIMMING POOL/SPA CHEMICALS IN THEIR

CONCENTRATED FORMS. REDUCING AGENT.

HAZARDOUS PRODUCTS OF THERMAL DECOMPOSITION CAN LEAD TO RELEASE OF TOXIC/CORROSIVE

DECOMPOSITION GASES AND VAPORS.

SECTION 11: TOXICOLOGICAL INFORMATION

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SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS LC50 LD50

1-BROMO-3-CHLORO-5,5-DIMETHYLIMIDAZOLIDINE-2,4-DIONE N.AV. 578 MG/KG (ORAL, RAT): > 2000 MG/KG (DERMAL, RABBIT)

INFORMATION ON LIKELY ROUTES OF

ENTRY:

SKIN CONTACT...... IRRITATING TO SKIN. CONTACT WITH MOIST SKIN MAY CAUSE SKIN BURNS.

CAUSES BURNS.

SKIN ABSORPTION..... N.AV.

EYE CONTACT..... RISK OF SERIOUS DAMAGE TO EYES. INHALATION..... IRRITATING TO RESPIRATORY SYSTEM.

INGESTION..... HARMFUL IF SWALLOWED. EFFECTS OF ACUTE EXPOSURE..... SEE ABOVE

EFFECTS OF CHRONIC EXPOSURE...... NO INFORMATION AVAILABLE.

SIGNS AND SYMPTOMS OF

OVEREXPOSURE

CARCINOGENICITY OF MATERIAL....... CAS# 16079-88-2 - NOT LISTED BY IARC.

TERATOGENICITY...... NO INFORMATION AVAILABLE. MUTAGENICITY..... NO INFORMATION AVAILABLE. REPRODUCTIVE EFFECTS..... NO INFORMATION AVAILABLE.

SENSITIZING CAPABILITY OF MATERIAL NO INFORMATION AVAILABLE.

SYNERGISTIC MATERIALS...... NO INFORMATION AVAILABLE

SECTION 12: ECOLOGICAL CONSIDERATIONS

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

SECTION 13: DISPOSAL CONSIDERATIONS

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

SECTION 14: TRANSPORT INFORMATION

1479

OXIDIZING SOLID, N.O.S. (BROMO-CHLORO-DIMETHYLHYDANTOIN).

PROPER SHIPPING NAME.....TDG CLASSIFICATION..... 5.1. PACKING GROUP..... ENVIRONMENTAL HAZARDS ACCORDING N.AV.

TO THE INTERNATIONAL MARITIME DANGEROUS GOODS CODE AND THE UNITED NATIONS MODEL REGULATIONS: SPECIAL PRECAUTIONS IN CONNECTION N.AV. WITH TRANSPORT OR CONVEYANCE

EITHER WITHIN OR OUTSIDE THE PREMISES:

SECTION 15: REGULATORY INFORMATION

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

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

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SECTION 16: OTHER INFORMATION

OTHER INFORMATION.....

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 THET ARE APPROPRIATE.

REGULATORY AFFAIRS