



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

PRODUCT: ENHANCER

CODE: MUR0058

SECTION 01: IDENTIFICATION

PRODUCT CODE..... MUR0058
 PRODUCT IDENTIFIER..... ENHANCER
 OTHER MEANS OF IDENTIFICATION..... N.AV.
 RECOMMENDED USE AND POOL CARE.
 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 (DERMAL) - CATEGORY 4. SKIN IRRITATION — CATEGORY 2. EYE IRRITATION - CATEGORY 2A . REPRODUCTIVE TOXICITY — CATEGORY 1B.
 SIGNAL WORD..... DANGER.
 HAZARD STATEMENT..... H312 HARMFUL IN CONTACT WITH SKIN. H315 CAUSES SKIN IRRITATION. H319 CAUSES SERIOUS EYE IRRITATION. H360 MAY DAMAGE FERTILITY OR THE UNBORN CHILD.
 PRECAUTIONARY STATEMENT..... P201 OBTAIN SPECIAL INSTRUCTIONS BEFORE USE. P202 DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. P264 WASH SKIN THOROUGHLY AFTER HANDLING. P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION. P302+P352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER. P305+P351+P338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. P312 CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL. P332+P313 IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/ATTENTION. P337+P313 IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ATTENTION. P362+P364 TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE REUSE. 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. %
BORIC ACID	10043-35-3	96.45
LANTHANUM SULFATE	10099-60-2	3.55

SECTION 04: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES:
 EYE CONTACT..... IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS AND PERSISTS.
 SKIN CONTACT..... TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE REUSE. WASH WITH PLENTY OF SOAP AND WATER.
 INHALATION..... IF BREATHING IS DIFFICULT, REMOVE TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. CALL A PHYSICIAN IF SYMPTOMS DEVELOP OR PERSIST.
 INGESTION..... CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL. RINSE MOUTH.

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SECTION 04: FIRST AID MEASURES

MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE OR DELAYED: INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

SYMPTOMS MAY INCLUDE STINGING, TEARING, REDNESS, SWELLING, AND BLURRED VISION. SKIN IRRITATION. MAY CAUSE REDNESS AND PAIN. PROVIDE GENERAL SUPPORTIVE MEASURES AND TREAT SYMPTOMATICALLY. KEEP VICTIM UNDER OBSERVATION. SYMPTOMS MAY BE DELAYED. ENSURE THAT MEDICAL PERSONNEL ARE AWARE OF THE MATERIAL(S) INVOLVED, AND TAKE PRECAUTIONS TO PROTECT THEMSELVES.

SECTION 05: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA..... WATER. WATER FOG. FOAM. DRY CHEMICAL POWDER. CARBON DIOXIDE (CO2).
 UNSUITABLE EXTINGUISHING MEDIA..... NONE KNOWN.
 SPECIAL HAZARDS ARISING FROM THE PRODUCT: DURING FIRE, GASES HAZARDOUS TO HEALTH MAY BE FORMED.
 HAZARDOUS COMBUSTION PRODUCTS. SEE HAZARDOUS DECOMPOSITION PRODUCTS.
 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING MUST BE WORN IN CASE OF FIRE. IN THE EVENT OF FIRE, COOL TANKS WITH WATER SPRAY.

SECTION 06: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS..... KEEP UNNECESSARY PERSONNEL AWAY. KEEP OUT OF LOW AREAS. KEEP PEOPLE AWAY FROM AND UPWIND OF SPILL/LEAK. WEAR APPROPRIATE PROTECTIVE EQUIPMENT AND CLOTHING DURING CLEAN-UP. DO NOT TOUCH DAMAGED CONTAINERS OR SPILLED MATERIAL UNLESS WEARING APPROPRIATE PROTECTIVE CLOTHING. ENSURE ADEQUATE VENTILATION. FOR PERSONAL PROTECTION, SEE SECTION 8 OF THE SDS.

ENVIRONMENTAL PRECAUTIONS..... AVOID DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND.
 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP..... THIS PRODUCT IS MISCIBLE IN WATER. STOP THE FLOW OF MATERIAL, IF THIS IS WITHOUT RISK. PREVENT ENTRY INTO WATERWAYS, SEWER, BASEMENTS OR CONFINED AREAS. FOLLOWING PRODUCT RECOVERY, FLUSH AREA WITH WATER. COLLECT INTO A SUITABLE CONTAINER FOR DISPOSAL.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:..... OBTAIN SPECIAL INSTRUCTIONS BEFORE USE. DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. DO NOT TASTE OR SWALLOW. AVOID CONTACT WITH EYES. AVOID CONTACT WITH SKIN. AVOID CONTACT DURING PREGNANCY/WHILE NURSING. AVOID PROLONGED EXPOSURE. AVOID CONTACT WITH CLOTHING. PROVIDE ADEQUATE VENTILATION. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES. WHEN USING, DO NOT EAT, DRINK OR SMOKE. WASH HANDS THOROUGHLY AFTER HANDLING. WASH CONTAMINATED CLOTHING BEFORE REUSE.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:..... STORE LOCKED UP. KEEP CONTAINER TIGHTLY CLOSED. STORE AWAY FROM INCOMPATIBLE MATERIALS (SEE SECTION 10 OF THE SDS).

SECTION 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	OSHA PEL STEL	REL	NIOSH
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BORIC ACID	2 MG/M3 (INHALABLE FRACTION)	6 MG/M3 (INHALABLE FRACTION)	N.AV.	N.AV.	N.AV.
LANTHANUM SULFATE	N.AV.	N.AV.	N.AV.	N.AV.	N.AV.

APPROPRIATE ENGINEERING CONTROLS GOOD GENERAL VENTILATION (TYPICALLY 10 AIR CHANGES PER HOUR) SHOULD BE USED. VENTILATION RATES SHOULD BE MATCHED TO CONDITIONS. IF APPLICABLE, USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO MAINTAIN AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS. IF EXPOSURE LIMITS HAVE NOT BEEN ESTABLISHED, MAINTAIN AIRBORNE LEVELS TO AN ACCEPTABLE LEVEL.

INDIVIDUAL PROTECTION MEASURE SUCH AS PERSONAL PROTECTIVE EQUIPMENTS:

HAND PROTECTION..... WEAR APPROPRIATE CHEMICAL RESISTANT GLOVES.
 RESPIRATORY PROTECTION..... IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT. NIOSH/MSHA APPROVED RESPIRATOR.
 EYE PROTECTION..... SAFETY GLASSES WITH SIDE SHIELDS OR CHEMICAL GOGGLES.

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SECTION 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

PROTECTIVE CLOTHING..... WEAR APPROPRIATE CHEMICAL RESISTANT CLOTHING.
 PROTECTIVE FOOTWEAR..... WEAR CHEMICAL-RESISTANT FOOTWEAR.
 OTHER..... EYE WASH STATION AND SAFETY SHOWER SHOULD BE LOCATED NEAR THE WORK STATION.
 HYGIENIC PRACTICES..... WHEN USING, DO NOT EAT, DRINK OR SMOKE. ALWAYS OBSERVE GOOD PERSONAL HYGIENE MEASURES, SUCH AS WASHING AFTER HANDLING THE MATERIAL AND BEFORE EATING, DRINKING, AND/OR SMOKING. ROUTINELY WASH WORK CLOTHING AND PROTECTIVE EQUIPMENT TO REMOVE CONTAMINANTS.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... SOLID. POWDER.
 COLOR..... WHITE.
 ODOUR..... ODOURLESS.
 ODOUR THRESHOLD..... N.AV.
 PH..... 3.5 - 4.5.
 MELTING/FREEZING POINT..... N.AV.
 BOILING POINT..... N.AP.
 FLASH POINT (C), METHOD..... N.AP.
 EVAPORATION RATE..... N.AP.
 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..... 0.9.
 SOLUBILITY IN WATER (% W/W)..... MODERATE.
 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:..... REACTS VIGOROUSLY WITH ALKALINE MATERIAL.
 CHEMICAL STABILITY:..... STABLE UNDER NORMAL CONDITIONS.
 POSSIBILITY OF HAZARDOUS NO DANGEROUS REACTION KNOWN UNDER CONDITIONS OF NORMAL USE.
 REACTIONS:
 CONDITIONS TO AVOID..... CONTACT WITH INCOMPATIBLE MATERIALS.
 INCOMPATIBLE MATERIALS:..... STRONG OXIDIZING AGENTS. CAUSTICS. REDUCING AGENTS.
 HAZARDOUS PRODUCTS OF OXIDES OF SULFUR. OXIDES OF BORON.
 DECOMPOSITION

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
BORIC ACID	N.AV.	2000 MG/KG (DERMAL, RABBIT); 3450 MG/KG (ORAL, MOUSE); 2660 MG/KG (ORAL, RAT).
LANTHANUM SULFATE	N.AV.	4991 MG/KG (ORAL, RAT)
INFORMATION ON LIKELY ROUTES OF ENTRY:		
SKIN CONTACT.....	HARMFUL IN CONTACT WITH SKIN.	
SKIN ABSORPTION.....	N.AV.	
EYE CONTACT.....	CAUSES SERIOUS EYE IRRITATION.	
INHALATION.....	NO ADVERSE EFFECTS DUE TO INHALATION ARE EXPECTED.	
INGESTION.....	EXPECTED TO BE A LOW INGESTION HAZARD.	
EFFECTS OF ACUTE EXPOSURE.....	SEE ABOVE.	
EFFECTS OF CHRONIC EXPOSURE.....	N.AV.	
SIGNS AND SYMPTOMS OF OVEREXPOSURE.....	SYMPTOMS MAY INCLUDE STINGING, TEARING, REDNESS, SWELLING, AND BLURRED VISION. SKIN IRRITATION. MAY CAUSE REDNESS AND PAIN.	
CARCINOGENICITY OF MATERIAL.....	OSHA: NOT CONSIDERED A CARCINOGEN UNDER OSHA.	
TERATOGENICITY.....	N.AV.	
MUTAGENICITY.....	N.AV.	
REPRODUCTIVE EFFECTS.....	MAY DAMAGE THE UNBORN CHILD. MAY DAMAGE FERTILITY.	
SENSITIZING CAPABILITY OF MATERIAL.....	THIS PRODUCT IS NOT EXPECTED TO CAUSE SKIN SENSITIZATION.	

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SECTION 11: TOXICOLOGICAL INFORMATION

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..... N.AP.
 PROPER SHIPPING NAME..... N.AP.
 TDG CLASSIFICATION..... NOT REGULATED.
 PACKING GROUP..... N.AP.
 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.

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