



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

PRODUCT: BUFFER

CODE: MUR0034

Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER/SUPPLIER..... MURSATT CHEMICALS LIMITED
11 REGALCREST COURT
WOODBIDGE, ONTARIO
CANADA
L4L 8P3
PREPARED BY..... REGULATORY AFFAIRS
PREPARATION DATE..... Apr18/14
PRODUCT NAME..... BUFFER
PRODUCT CODE..... MUR0034
CHEMICAL FORMULA..... N.AV.
MOLECULAR WEIGHT..... N.AV.
CHEMICAL FAMILY..... N.AV.
MATERIAL USE..... N.AV.
EMERGENCY PHONE NO..... CANUTEC (613)-996-6666.

Section 02: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
SKIN CONTACT..... NO SIGNIFICANT EFFECTS ANTICIPATED.
SKIN ABSORPTION..... N.AV.
EYE CONTACT..... NO SIGNIFICANT EFFECTS ANTICIPATED.
INHALATION..... NO SIGNIFICANT EFFECTS ANTICIPATED.
INGESTION..... NO SIGNIFICANT EFFECTS ANTICIPATED.
EFFECTS OF ACUTE EXPOSURE..... SEE ABOVE.
EFFECTS OF CHRONIC EXPOSURE..... NO KNOWN EFFECT.

Section 03: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route,Species	LC/50 Route,Species
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NONE

Section 04: FIRST AID MEASURES

EYE CONTACT..... FLUSH EYES WITH WATER AS A PRECAUTION. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS AND PERSISTS.
SKIN CONTACT..... WASH SKIN WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS AND PERSISTS.
INHALATION..... REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS CONTINUE, GET MEDICAL ATTENTION.
INGESTION..... DRINK PLENTY OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR.
NOTES TO PHYSICIAN..... N.AV.

Section 05: FIRE FIGHTING MEASURES

T.D.G. FLAM. CLASS..... NOT REGULATED.
FLAMMABILITY..... NON-COMBUSTIBLE.
EXTINGUISHING MEDIA..... WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE (CO2), OR FOAM.
SPECIAL PROCEDURES..... N.AV.
FLASH POINT (C), METHOD..... NONCOMBUSTIBLE.
AUTO IGNITION TEMPERATURE..... N.AV.
UPPER FLAMMABLE LIMIT (% BY VOL.)... N.AV.
LOWER FLAMMABLE LIMIT (% BY VOL.)... N.AV.
EXPLOSION DATA..... N.AV.
EXPLOSIVE POWER..... N.AV.
RATE OF BURNING..... N.AV.
OXIDIZING PROPERTIES..... N.AV.
SENSITIVITY TO STATIC DISCHARGE..... NOT SENSITIVE.
SENSITIVITY TO IMPACT..... NOT SENSITIVE.
HAZARDOUS COMBUSTION PRODUCTS.. NONE.

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Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... PERSONAL PRECAUTIONS: AVOID DUST FORMATION. METHODS FOR CONTAINMENT: MATERIAL MAY BE RECYCLED WHEN CONTAMINATION IS NOT A PROBLEM. METHODS FOR CLEANING UP: SWEEP UP AND SHOVEL INTO SUITABLE CONTAINERS FOR DISPOSAL.

Section 07: HANDLING AND STORAGE

HANDLING..... USE AIR CONVEYING/MECHANICAL SYSTEMS FOR BULK TRANSFER TO STORAGE. PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED. IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT.

STORAGE..... KEEP IN A DRY, COOL AND WELL-VENTILATED PLACE. KEEP AWAY FROM HEAT. KEEP AWAY FROM INCOMPATIBLE PRODUCTS (ACIDS).

Section 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

GLOVES/ TYPE..... PROTECTIVE GLOVES.

RESPIRATORY/TYPE..... WHENEVER DUST IN THE WORKER'S BREATHING ZONE CANNOT BE CONTROLLED WITH VENTILATION OR OTHER ENGINEERING MEANS, WORKERS SHOULD WEAR RESPIRATORS OR DUST MASKS APPROVED BY NIOSH/MSHA, EU CEN OR COMPARABLE ORGANIZATION TO PROTECT AGAINST AIRBORNE DUST.

EYE/TYPE..... SAFETY GLASSES WITH SIDE SHIELDS.

FOOTWEAR/TYPE..... PROTECTIVE SHOES OR BOOTS.

CLOTHING/TYPE..... WEAR SUITABLE PROTECTIVE CLOTHING.

OTHER/TYPE..... EYE WASH STATIONS AND SAFETY DRENCH SHOWERS SHOULD BE AVAILABLE IN WORK AREAS.

ENGINEERING CONTROLS..... WHERE REASONABLY PRACTICABLE THIS SHOULD BE ACHIEVED BY THE USE OF LOCAL EXHAUST VENTILATION AND GOOD GENERAL EXTRACTION.

HYGIENE MEASURES..... HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.

GENERAL..... IF THE PRODUCT IS USED IN MIXTURES, IT IS RECOMMENDED THAT YOU CONTACT THE APPROPRIATE PROTECTIVE EQUIPMENT SUPPLIERS, THESE RECOMMENDATIONS APPLY TO THE PRODUCT AS SUPPLIED.

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... SOLID. WHITE CRYSTALLINE POWDER.

ODOUR..... ODOURLESS.

ODOUR THRESHOLD..... N.AP.

VAPOUR PRESSURE (MMHG)..... N.AP.

VAPOUR DENSITY (AIR=1).....

EVAPORATION RATE..... N.AP.

BOILING POINT..... N.AP.

MELTING POINT (C)..... DECOMPOSES.

PH..... 8.3 (1% SOLUTION).

SPECIFIC GRAVITY (WATER=1)..... 2.20.

DENSITY (G/ML)..... 0.88.

SOLUBILITY IN WATER (% W/W)..... @ 20°C (68°F): 9.0.

COEFFICIENT OF WATER/OIL DIST..... N.AV.

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY..... STABLE.

CONDITIONS TO AVOID..... EXCESSIVE HEAT.

MATERIALS TO AVOID..... EXCEPT UNDER CONTROLLED CONDITIONS: ACIDS.

HAZARDOUS PRODUCTS OF DECOMPOSITION..... REACTS WITH ACIDS TO RELEASE CARBON DIOXIDE GAS AND HEAT.

HAZARDOUS POLYMERIZATION..... HAZARDOUS POLYMERIZATION DOES NOT OCCUR.

Section 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL..... THIS PRODUCT DOES NOT CONTAIN ANY HAZARDOUS MATERIALS WITH OCCUPATIONAL EXPOSURE LIMITS ESTABLISHED BY THE REGION SPECIFIC REGULATORY BODIES. LOCAL NUISANCE DUST STANDARDS APPLY.

LC 50 OF MATERIAL, SPECIES & ROUTE.. NO INFORMATION AVAILABLE.

LD 50 OF MATERIAL, SPECIES & ROUTE.. ORAL: 20% SLURRY: 4,300 MG/KG (RAT); 50 % SLURRY: 6,000 MG/KG (RAT). .

ACUTE EFFECTS FROM OVEREXPOSURE DERMAL: NO DATA AVAILABLE FOR THE PRODUCT. THIS PRODUCT IS APPROVED FOR USE AS A FOOD INGREDIENT AND IS GENERALLY RECOGNIZED AS SAFE (GRAS).

CHRONIC TOXICITY..... NO KNOWN EFFECT.

CARCINOGENICITY OF MATERIAL..... IARC: NOT LISTED.

REPRODUCTIVE EFFECTS..... N.AV.

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Section 11: TOXICOLOGICAL INFORMATION

IRRITANCY OF MATERIAL..... SEE SECTION 02.
 SENSITIZING CAPABILITY OF MATERIAL..... N.AV.
 SYNERGISTIC MATERIALS..... N.AV.

Section 12: ECOLOGICAL CONSIDERATIONS

ECOTOXICITY..... NOT EXPECTED TO HAVE SIGNIFICANT ENVIRONMENTAL EFFECTS.
 BIOACCUMULATION..... DOES NOT BIOACCUMULATE.
 PERSISTENCE AND DEGRADATION..... BIODEGRADABILITY DOES NOT PERTAIN TO INORGANIC SUBSTANCES.
 MOBILITY..... DISSOCIATES INTO IONS.

Section 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL..... DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

Section 14: TRANSPORT INFORMATION

TDG CLASSIFICATION..... NOT REGULATED.
 UN NUMBER..... N.AP.
 PACKING GROUP..... N.AP.

Section 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION..... THIS IS NOT A WHMIS CONTROLLED PRODUCT.
 CPR COMPLIANCE..... THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

Section 16: OTHER INFORMATION

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