

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

PRODUCT: CAL-HYPO CODE: MUR0049

## Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER/SUPPLIER..... MURSATT CHEMICALS LIMITED

11 REGALCREST COURT WOODBRIDGE, ONTARIO

**CANADA** 

L4L 8P3

PREPARED BY..... **REGULATORY AFFAIRS** 

PREPARATION DATE...... Apr23/14 PRODUCT NAME...... CAL-HYPO PRODUCT CODE...... MUR0049 CHEMICAL FORMULA..... MIXTURE. MOLECULAR WEIGHT...... MIXTURE. CHEMICAL FAMILY..... MIXTURE. MATERIAL USE...... N.AV.

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

## Section 02: HAZARDS IDENTIFICATION

ROUTE OF ENTRY: 

SKIN ABSORPTION...... N.AV.

CORROSIVE TO EYES. CAUSES BURNS. EYE CONTACT.....

INHALATION...... HARMFUL IF INHALED. SEVERELY IRRITATING TO THE RESPIRATORY SYSTEM.

CAN IRRITATE EYES, NOSE, MOUTH AND THROAT.

INGESTION...... HARMFUL OR FATAL IF SWALLOWED, MAY CAUSE BURNS TO MOUTH, THROAT

AND STOMACH.

EFFECTS OF ACUTE EXPOSURE................ CAUSES EYE AND SKIN BURNS. CAUSES RESPIRATORY TRACT IRRITATION.

HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED. CONTAINS MATERIAL

THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. EFFECTS OF CHRONIC EXPOSURE........ PRE-EXISTING DISORDERS INVOLVING ANY TARGET ORGANS MENTIONED IN

THIS MSDS AS BEING AT RISK MAY BE AGGRAVATED BY OVER-EXPOSURE TO

THIS PRODUCT.

SHORTNESS OF BREATH, PULMONARY EDEMA. INGESTION: STOMACH PAINS, NAUSEA OR VOMITING, GASTRIC PERFORATION. SKIN: PAIN OR IRRITATION, REDNESS, BLISTERING MAY OCCUR. EYES: PAIN, WATERING, REDNESS, CORNEA

OPACITY, DIRECT CONTACT WITH THE EYES CAN CAUSE IRREVERSIBLE DAMAGE, INCLUDING BLINDNESS.

## Section 03: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route,Species	LC/50 Route,Species
CALCIUM HYPOCHLORITE	60-100	SEE SECTION 11	7778-54-3	SEE SECTION 11	SEE SECTION 11
CALCIUM CHLORATE	0-3	SEE SECTION 11	10137-74-3	SEE SECTION 11	SEE SECTION 11
CALCIUM CARBONATE	1-5	SEE SECTION 11	471-34-1	SEE SECTION 11	SEE SECTION 11
CALCIUM HYDROXIDE	1-5	SEE SECTION 11	1305-62-0	SEE SECTION 11	SEE SECTION 11
SODIUM CHLORIDE	10-30	SEE SECTION 11	7647-14-5	SEE SECTION 11	SEE SECTION 11

## **Section 04: FIRST AID MEASURES**

INGESTED OR INHALED.

EYE CONTACT	WITH RUNNING WATER FOR AT LEAST 15 MINUTES, KEEPING EYELIDS OPEN.
SKIN CONTACT	CONTINUE RINSING UNTIL MEDICAL ATTENTION CAN BE OBTAINED. IN CASE OF CONTACT, IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.
INHALATION	GET IMMEDIATE MEDICAL ATTENTION. REMOVE TO FRESH AIR. KEEP PERSON WARM AND AT REST. IF NOT BREATHING, IF BREATHING IS IRREGULAR OR IF RESPIRATORY ARREST OCCURS, PROVIDE ARTIFICIAL RESPIRATION OR OXYGEN BY TRAINED PERSONNEL. GET MEDICAL
INGESTION	ATTENTION IMMEDIATELY.
NOTES TO PHYSICIAN	VOMITING. GET MEDICAL ATTENTION IMMEDIATELY. NO SPECIFIC TREATMENT. TREAT SYMPTOMATICALLY. CONTACT POISON TREATMENT SPECIALIST IMMEDIATELY IF LARGE QUANTITIES HAVE BEEN

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PRODUCT: CAL-HYPO		CODE: MUR0049
Section	05: FIRE FIGHTING MEASURES	
T.D.G. FLAM. CLASSFLAMMABILITY	PRODUCT IS NOT KNOWN TO BE FLAMMABLE, COMBUSTHIS MATERIAL INCREASES THE RISK OF FIRE AND MACONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE	AY AID COMBUSTION. FIRE. THIS PRODUCT IS A
EXTINGUISHING MEDIA	STRONG OXIDIZER WHICH IS CAPABLE OF INTENSIFYING CONTAINER MAY RUPTURE. SUITABLE: DRENCH WITH LARGE QUANTITIES OF WAT DO NOT USE DRY CHEMICALS OR FOAMS. PRODUCT S THEREFORE ATTEMPTS TO SMOTHER FIRE WITH A WE DIOXIDE, DRY CHEMICAL EXTINGUISHER OR OTHER M	TER ONLY. NOT SUITABLE : SUPPLIES OWN OXYGEN, ET BLANKET, CARBON
SPECIAL PROCEDURES	PRODUCT HAS THE POTENTIAL TO CAUSE A VIOLENT I CHEMICAL FIRE EXTINGUISHERS ARE USED. PROMPTLY ISOLATE THE SCENE BY REMOVING ALL PE VICINITY OF THE INCIDENT IF THERE IS A FIRE. NO ACT INVOLVING ANY PERSONAL RISK OR WITHOUT SUITAB	REACTION IF DRY ERSONS FROM THE TION SHALL BE TAKEN BLE TRAINING. EMITS TOXIC
SPECIAL FIREFIGHTING PROCEDURES	FUMES UNDER FIRE CONDITIONS. CHLORINE GAS MAY FIRE-FIGHTERS SHOULD WEAR APPROPRIATE PROTECT SELF-CONTAINED BREATHING APPARATUS (SCBA) WIT OPERATED IN POSITIVE PRESSURE MODE.	CTIVE EQUIPMENT AND
FLASH POINT (C), METHOD	N.AP. N.AV. N.AP. N.AV. N.AV. N.AV. N.AV.	POUNDS AND METAL
Section 06:	ACCIDENTAL RELEASE MEASURES	
PERSONAL PRECAUTIONS	NO ACTION SHALL BE TAKEN INVOLVING ANY PERSON SUITABLE TRAINING. EVACUATE SURROUNDING AREA AND UNPROTECTED PERSONNEL FROM ENTERING. DO THROUGH SPILLED MATERIAL. SHUT OFF ALL IGNITION SMOKING OR FLAMES IN HAZARD AREA. PROVIDE ADE WEAR APPROPRIATE RESPIRATOR WHEN VENTILATION APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. AVOID DISPERSAL OF SPILLED MATERIAL AND RUNOFF WATERWAYS, DRAINS AND SEWERS. INFORM THE REL THE PRODUCT HAS CAUSED ENVIRONMENTAL POLLUT WATERWAYS, SOIL OR AIR). WATER POLLUTING MATER	AS. KEEP UNNECESSARY O NOT TOUCH OR WALK N SOURCES. NO FLARES, EQUATE VENTILATION. IN IS INADEQUATE. PUT ON IF AND CONTACT WITH SOIL, LEVANT AUTHORITIES IF TION (SEWERS,
LARGE SPILL	THE ENVIRONMENT IF RELEASED IN LARGE QUANTITIE USE EXTREME CAUTION IN HANDLING SPILLED MATER TOOLS AND EXPLOSIONPROOF EQUIPMENT. DO NOT MANY OTHER CHEMICALS, INCLUDING ANY OTHER POOL SUCH AS OTHER DISINFECTION OR "SHOCK" POOL PROWITH MOISTURE, ACIDS, ORGANIC MATTER, OTHER POOL LIMITED TO CLEANING CHEMICALS AND OTHER POPETROLEUM OR PAINT PRODUCTS OR OTHER EASILY MAY START A CHEMICAL REACTION WITH GENERATION HAZARDOUS GASES AND POSSIBLE VIOLENT REACTION EXPLOSION. IF FIRE OR DECOMPOSITION OCCURS IN MIMMEDIATELY DOUSE WITH PLENTY OF WATER. OTHER VISIBLE MATERIAL USING A CLEAN (NEW, IF POSSIBLE BROOM AND IMMEDIATELY DISSOLVE MATERIAL IN A VISPILLED MATERIAL THAT HAS BEEN SWEPT UP AND DISHOULD BE USED IMMEDIATELY IN THE NORMAL APPL PRODUCT IS BEING CONSUMED. PREVENT ENTRY INTO COURSES, BASEMENTS OR CONFINED AREAS. NOTE: SEMERGENCY CONTACT INFORMATION AND SECTION 1	RIAL. USE SPARK-PROOF MIX THIS PRODUCT WITH IL CHEMICALS OF ANY KIND, ODUCTS. CONTAMINATION HEMICALS (INCLUDING, BUT OOL CHEMICALS), COMBUSTIBLE MATERIALS N OF HEAT, LIBERATION OF DN LEADING TO FIRE OR AREA OF SPILL, RWISE, SWEEP UP ALL ED, DRY SHOVEL AND WATER-FILLED CONTAINER. ISSOLVED IN WATER LICATION FOR WHICH THIS O SEWERS, WATER SEE SECTION 1 FOR
SMALL SPILL	USE EXTREME CAUTION IN HANDLING SPILLED MATER TOOLS AND EXPLOSIONPROOF EQUIPMENT. DO NOT IN ANY OTHER CHEMICALS, INCLUDING ANY OTHER POOL SUCH AS OTHER DISINFECTION OR "SHOCK" POOL PROWITH MOISTURE, ACIDS, ORGANIC MATTER, OTHER CHOT LIMITED TO CLEANING CHEMICALS AND OTHER POPETROLEUM OR PAINT PRODUCTS OR OTHER EASILY MAY START A CHEMICAL REACTION WITH GENERATION	RIAL. USE SPARK-PROOF MIX THIS PRODUCT WITH PL CHEMICALS OF ANY KIND, ODUCTS. CONTAMINATION HEMICALS (INCLUDING, BUT OOL CHEMICALS), COMBUSTIBLE MATERIALS

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Section 06:	ACCIDENTAL RELEASE MEASURES	
SMALL SPILL	HAZARDOUS GASES AND POSSIBLE VIOLENT REACTION EXPLOSION. IF FIRE OR DECOMPOSITION OCCURS IN AI IMMEDIATELY DOUSE WITH PLENTY OF WATER. OTHER VISIBLE MATERIAL USING A CLEAN (NEW, IF POSSIBLE), BROOM AND IMMEDIATELY DISSOLVE MATERIAL IN A W. SPILLED MATERIAL THAT HAS BEEN SWEPT UP AND DISSHOULD BE USED IMMEDIATELY IN THE NORMAL APPLIC PRODUCT IS BEING CONSUMED. PREVENT ENTRY INTO COURSES, BASEMENTS OR CONFINED AREAS. NOTE: SIEMERGENCY CONTACT INFORMATION AND SECTION 13	REA OF SPILL, WISE, SWEEP UP ALL DRY SHOVEL AND ATER-FILLED CONTAINER. SSOLVED IN WATER CATION FOR WHICH THIS SEWERS, WATER EE SECTION 1 FOR
Section	07: HANDLING AND STORAGE	
HANDLING PROCEDURES ANDEQUIPMENT	USE EXTREME CAUTION IN HANDLING SPILLED MATERIA PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8). SMOKING SHOULD BE PROHIBITED IN AREAS WHERE TH HANDLED, STORED AND PROCESSED. DO NOT SWALLO OR ON SKIN OR CLOTHING. USE ONLY WITH ADEQUATE APPROPRIATE RESPIRATOR WHEN VENTILATION IS INA ORIGINAL CONTAINER WITH THE LID SECURELY CLOSE HEAT, SPARKS, FLAMES, DIRECT SUNLIGHT, AND OTHEI INCLUDING LIGHTED TOBACCO PRODUCTS. KEEP AWAY MATERIAL. ADD THIS PRODUCT ONLY TO WATER. NEVE PRODUCT. ALWAYS ADD THE PRODUCT TO LARGE QUANOT MIX THIS PRODUCT WITH ANY OTHER CHEMICALS, POOL CHEMICALS OF ANY KIND, SUCH AS OTHER DISIN POOL PRODUCTS. FIRE MAY RESULT IF CONTAMINATED MATERIALS AND OTHER EASILY COMBUSTIBLE MATERIALS COOP MADE OF METAL OR PRODUCT IS TAKEN FROM THE CONTAINER. DO NOT ADDISPENSING DEVICE CONTAINING REMNANTS OF ANY OPOOL CHEMICAL. SUCH USE MAY CAUSE VIOLENT REACOR EXPLOSION. EMPTY CONTAINERS RETAIN PRODUCT HAZARDOUS. DO NOT REUSE CONTAINER. RESIDUAL MEMPTY CONTAINER CAN REACT TO CAUSE FIRE. THORY CONTAINER WITH WATER THEN DESTROY BY PLACING STORE IN ACCORDANCE WITH LOCAL REGULATIONS. S'CONTAINER WITH WATER THEN DESTROY BY PLACING STORE IN ACCORDANCE WITH LOCAL REGULATIONS. S'CONTAINER WITH WATER THEN DESTROY BY PLACING STORE IN ACCORDANCE WITH LOCAL REGULATIONS. S'CONTAINER WITH WATER THEN DESTROY BY PLACING STORE IN ACCORDANCE WITH LOCAL REGULATIONS. S'CONTAINER WITH WATER THEN DESTROY BY PLACING STORE IN ACCORDANCE WITH LOCAL REGULATIONS. S'CONTAINER WITH WATER THEN DESTROY BY PLACING STORE IN ACCORDANCE WITH LOCAL REGULATIONS. S'CONTAINER WITH WATER THEN DESTROY BY PLACING STORE WITH A WATER THEN DESTROY BY PLACING STORE WITH A WATER	EATING, DRINKING AND HIS MATERIAL IS W. DO NOT GET IN EYES VENTILATION. WEAR DEQUATE. KEEP IN THE D. KEEP AWAY FROM R SOURCES OF HEAT, Y FROM COMBUSTIBLE R ADD WATER TO THIS INTITIES OF WATER. DO INCLUDING ANY OTHER IFECTION OR "SHOCK" D WITH ACIDS, ORGANIC ALS SUCH AS OIL, PAPER. USE ONLY A CLEAN PLASTIC EACH TIME DD THIS PRODUCT OR CTION LEADING TO FIRE IF RESIDUE AND CAN BE IATERIAL REMAINING IN DUGHLY FLUSH EMPTY IN TRASH COLLECTION. TORE IN ORIGINAL DRY, COOL AND MATERIALS (SEE SECTION G AGENTS AND S MATERIALS CODE FOR O, HAZARDOUS DE FOR STORAGE OF SED. CONTAINERS THAT AND KEPT UPRIGHT TO ATED OR DECOMPOSES NTAINER IN OPEN AIR OR D CONTAINERS. USE FAL CONTAINERS. USE
Section 08: EXPOS	SURE CONTROLS AND PERSONAL PROTECTION	ı
GLOVES/ TYPE	CHEMICAL-RESISTANT, IMPERVIOUS GLOVES COMPLYII STANDARD SHOULD BE WORN AT ALL TIMES WHEN HAN PRODUCTS IF A RISK ASSESSMENT INDICATES THIS IS I	NDLING CHEMICAL
	NEOPRENE OR BUTYL RUBBER GLOVES. IF WORKERS ARE EXPOSED TO CONCENTRATIONS ABOUTHEY MUST USE APPROPRIATE, CERTIFIED RESPIRATO FITTED, AIR-PURIFYING OR AIR-FED RESPIRATOR COMPAPROVED STANDARD IF A RISK ASSESSMENT INDICAT RESPIRATOR SELECTION MUST BE BASED ON KNOWN OF EXPOSURE LEVELS, THE HAZARDS OF THE PRODUCT A LIMITS OF THE SELECTED RESPIRATOR	OVE THE EXPOSURE LIMIT, DRS. USE A PROPERLY PLYING WITH AN TES THIS IS NECESSARY. OR ANTICIPATED
FOOTWEAR/TYPE CLOTHING/TYPE	CHEMICAL SPLASH GOGGLES AND FACE SHIELD. PROTECTIVE FOOTWEAR. PROTECTIVE CLOTHING. EYEWASH STATION AND SAFETY SHOWER IN WORK AR	EA.

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Section 08: EXPOS	URE CONTROLS AND PERSONAL PROTECTION			
	USE ONLY WITH ADEQUATE VENTILATION. IF USER OPERATIONS GENERATE DUST, FUMES, GAS, VAPOR OR MIST, USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION OR OTHER ENGINEERING CONTROLS TO KEEP WORKER EXPOSURE TO AIRBORNE CONTAMINANTS BELOW ANY RECOMMENDED OR STATUTORY LIMITS.  WASH HANDS, FOREARMS AND FACE THOROUGHLY AFTER HANDLING CHEMICAL PRODUCTS, BEFORE EATING, SMOKING AND USING THE LAVATORY AND AT THE END OF THE WORKING PERIOD. APPROPRIATE TECHNIQUES SHOULD BE USED TO REMOVE POTENTIALLY CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING BEFORE REUSING. ENSURE THAT EYEWASH STATIONS AND SAFETY SHOWERS ARE CLOSE TO THE WORKSTATION LOCATION.			
Section 09: P	Section 09: PHYSICAL AND CHEMICAL PROPERTIES			
PH	SLIGHT CHLORINE. N.AV. N.AV. N.AV. N.AV. N.AP. DECOMPOSES AT APPROXIMATELY 338 - 356F (170 - 180C). ALKALINE. BULK DENSITY: 63-67 LBS/FT3 (1 - 1.07 G/CM3). 100 G/L AT ROOM TEMPERATURE.			
Section :	10: STABILITY AND REACTIVITY			
CONDITIONS TO AVOID MATERIALS TO AVOID	STABLE UNDER RECOMMENDED STORAGE AND HANDLING CONDITIONS (SEE SECTION 7). PRODUCT DECOMPOSES AT APPROXIMATELY 170-180°C (338-356°F) RELEASING OXYGEN GAS AND SOME CHLORINE GAS. HEATING MAY CAUSE A FIRE OR EXPLOSION. EXCESSIVE HEAT WILL CAUSE DECOMPOSITION RESULTING IN THE RELEASE OF OXYGEN AND CHLORINE GAS. HIGHLY REACTIVE OR INCOMPATIBLE WITH THE FOLLOWING MATERIALS: MOISTURE, COMBUSTIBLE MATERIALS, ORGANIC MATERIALS, METALS, ACIDS, ALKALIS, OXIDIZING MATERIALS, REDUCING MATERIALS, AMMONIA, PETROLEUM PRODUCTS, PAINT PRODUCTS, WOOD AND PAPER, POOL CHEMICALS. ACID OR AMMONIA CONTAMINATION WILL RELEASE TOXIC GASES. PRODUCT SLOWLY RELEASES CHLORINE GAS.			
Section 11	: TOXICOLOGICAL INFORMATION			
LC 50 OF MATERIAL, SPECIES & ROUTE LD 50 OF MATERIAL, SPECIES & ROUTE  CARCINOGENICITY OF MATERIAL	CALCIUM HYPOCHLORITE: ORAL (RAT) - 850 MG/KG; DERMAL (RABBIT) - >1000 MG/KG . SODIUM CHLORIDE: ORAL (RAT) - 3000 MG/KG. CALCIUM CARBONATE: ORAL (RAT) - 6450 MG/KG. CALCIUM CHLORATE: ORAL (RAT) - 4.5 G/KG. CALCIUM DIHYDROXIDE: ORAL (RAT) - 7340 MG/KG. CALCIUM HYPOCHLORITE - IARC: 3. NO KNOWN SIGNIFICANT EFFECTS OR CRITICAL HAZARDS. SEE SECTION 02. N.AV. N.AV.			
Section 12	: ECOLOGICAL CONSIDERATIONS			
ECOLOGICAL INFORMATION				
Section	13: DISPOSAL CONSIDERATIONS			
WASTE DISPOSAL	DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.			

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Section	14: TRANSPORT INFORMATION
TDG CLASSIFICATION PROPER SHIPPING NAME UN NUMBER PACKING GROUP	. CALCIUM HYPOCHLORITE, HYDRATED. . 2880.
Section	15: REGULATORY INFORMATION
WHMIS CLASSIFICATIONCPR COMPLIANCE	. C. E 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.
Sec	ion 16: OTHER INFORMATION
N.AP.=NOT APPLICABLE N.AV.=NOT AVAILABLE OTHER INFORMATION	