

ACETIC ACID 20%

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT IDENTIFIER: PRODUCT USE:

CHEMICAL FAMILY:

ACETIC ACID MANUFACTURE OF CELLULOSE ACETATE, VINYL ACETATE AND A VARIETY OF ACETATE ESTERS N/AV. UBA INC. 2192 WYECROFT RD., OAKVILLE, ON L6L6R1 905-827-4133 613-996-6666 (CANUTEC)

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION OF THE CHEMICAL

SUPPLIER'S NAME AND ADDRESS:

24 HR. EMERGENCY NUMBER:

CLEAR, COLOURLESS LIQUID WITH A VINEGAR ODOUR.

THIS MATERIAL IS CLASSIFIED AS HAZARDOUS UNDER U.S. OSHA REGULATIONS (29CFR 1910.1200)(HAZCOM 2012) AND CANADIAN WHMIS REGULATIONS (HAZARDOUS PRODUCTS REGULATIONS) (WHMIS 2015).

HAZARD CLASSIFICATION: CORROSIVE TO METALS: CATEGORY 1 FLAMMABLE LIQUID: CATEGORY 4 ACUTE TOXICITY, DERMAL: CATEGORY 4 ACUTE TOXICITY, INHALATION: CATEGORY 4 EYE DAMAGE/IRRITATION: CATEGORY 1 SKIN CORROSION/IRRITATION: CATEGORY 1 SPECIFIC TARGET ORGAN, SINGLE EXPOSURE: CATEGORY 3 (RESPIRATORY)

LABEL ELEMENTS

HAZARD PICTOGRAMS



SIGNAL WORD

WARNING!

HAZARD STATEMENT

CAUSES SKIN IRRITATION CAUSES ERIOUS EYE IRRITATION

PRECAUTIONARY STATEMENTS

KEEP CONTAINER TIGHTLY CLOSED. KEEP ONLY IN ORIGINAL CONTAINER. DO NOT BREATHE MIST OR VAPOR. WASH THOROUGHLY AFTER HANDLING. USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA. WEAR PROTECTIVE GLOVES/CLOTHING AND EYE/FACE PROTECTION.

IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING. IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER. WASH CONTAMINATED CLOTHING BEFORE REUSE. CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL. IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. 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. IN CASE OF FIRE: USE WATER FOG, DRY CHEMICAL, CO2 OR 'ALCOHOL' FOAM TO EXTINGUISH. ABSORB SPILLAGE TO PREVENT MATERIAL DAMAGE. STORE IN A WELL-VENTILATED PLACE. KEEP COOL. KEEP CONTAINER TIGHTLY CLOSED. STORE LOCKED UP. STORE IN CORROSIVE RESISTANT CONTAINER WITH A RESISTANT INNER LINER. DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATIONS.

OTHER HAZARDS

OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION: INGESTION CAN CAUSE IRRITATION AND CORROSIVE ACTION IN THE MOUTH, STOMACH AND DIGESTIVE TRACT.CONTACT WITH METALS MAY RELEASE SMALL AMOUNTS OF FLAMMABLE HYDROGEN GAS.

| GEOTIONA | COMPOSITION/// TODA (A FLON ON INCORDING) |
|------------|---|
| SECTION 3: | COMPOSITION/INFORMATION ON INGREDIENTS |

| INGREDIENTS | C.A.S. # | WT.% | TWAEV/TLV | LC50 | LD50 | |
|-------------|----------|------|------------------------|--------------------|--------------------|-----------------------|
| | | | | INHALATION | ORAL | SKIN |
| ACETIC ACID | 64-19-7 | 20% | 10/25mg/m ³ | 2810ppm (MOUSE) | 3310mg/kg (RAT) | 1590mg/kg (RABBIT) |

| | SECTION 4: FIRST AID MEASURES | | | | | | |
|----------------|--|--|--|--|--|--|--|
| | | | | | | | |
| INHALATION: | REMOVE FROM CONTAMINATED AREA PROMPTLY. CAUTION: RESCUER MUST NOT ENDANGER | | | | | | |
| | THEMSELF! IF BREATHING STOPS ADMINISTER ARTIFICIAL RESPIRATION AND SEEK MEDICAL | | | | | | |
| | AID PROMPTLY. | | | | | | |
| SKIN CONTACT: | WASH WITH PLENTY OF WATER. FLUSH SKIN FOR A MINIMUM OF 30 MINUTES. REMOVE | | | | | | |
| | CONTAMINATED CLOTHING AND DO NOT REUSE UNTIL THOROUGHLY LAUNDERED. IF | | | | | | |
| | IRRITATION PERSISTS, REPEAT FLUSHING. OBTAIN MEDICAL ATTENTION IMMEDIATELY. DO | | | | | | |
| | NOT TRANSPORT VICTIM UNTIL THE RECOMMENDED FLUSHING PERIOD IS COMPLETED | | | | | | |
| | UNLESS FLUSHING CAN BE CONTINUED DURING TRANSPORT. | | | | | | |
| EYE CONTACT: | WASH EYES WITH PLENTY OF WATER, HOLDING EYELIDS OPEN. IF IRRITATION PERSISTS, | | | | | | |
| | REPEAT FLUSHING. SEEK MEDICAL ASSISTANCE PROMPTLY IF THERE IS IRRITATION. DO NOT | | | | | | |
| | TRANSPORT VICTIM UNTIL THE RECOMMENDED FLUSHING PERIOD IS COMPLETED UNLESS | | | | | | |
| | FLUSHING CAN BE CONTINUED DURING TRANSPORT. | | | | | | |
| INGESTION: | GIVE PLENTY OF WATER TO DILUTE PRODUCT. DO NOT INDUCE VOMITING (NOTE BELOW). | | | | | | |
| | KEEP VICTIM QUIET. IF VOMITING OCCURS, LOWER VICTIM'S HEAD BELOW HIPS TO | | | | | | |
| | PREVENT INHALATION OF VOMITED MATERIAL. SEEK MEDICAL ATTENTION PROMPTLY. | | | | | | |
| NOTES TO PHYSI | CIAN: | | | | | | |
| | INADVERTENT INHALATION OF VOMITED MATERIAL MAY SERIOUSLY DAMAGE THE LUNGS. | | | | | | |
| | THE DANGER OF THIS IS GREATER THAN THE RISK OF POISONING THROUGH ABSORPTION OF | | | | | | |
| | THIS RELATIVELY LOW-TOXICITY SUBSTANCE. THE STOMACH SHOULD ONLY BE EMPTIED | | | | | | |
| | UNDER MEDICAL SUPERVISION, AND AFTER THE INSTALLATION OF AN AIRWAY TO PROTECT | | | | | | |
| | THE LUNGS. | | | | | | |

SECTION 5: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:

WATER OR FINE SPRAY, CO2, SAND, EXTINGUISHING POWDER.

UNSUITABLE EXTINGUISHING MEDIA:

DO NOT USE SOLID WATER STREAM AS IT MAY SCATTER AND SPREAD FIRE.

SPECIAL FIRE-FIGHTING PROCEDURES/EQUIPMENT:

FIRE FIGHTERS MUST WEAR SCBA (SELF-CONTAINED BREATHING APPARATUS). KEEP FIRE-EXPOSED CONTAINERS COOL.

HAZARDOUS COMBUSTION PRODUCTS:

CARBON MONOXIDE, NITROGEN OXIDES, UNBURNT ACID, PART OXIDIZED HYDROCARBON FRAGMENTS.

SECTION 6: ACCIDENTAL RELEASE MEASURES

LEAK AND SPILL PROCEDURES:

PERSONAL PROTECTIONS:

WEAR PROTECTIVE EQUIPMENT. KEEP UNPROTECTED PERSONS AWAY. WEAR A SUITABLE RESPIRATOR WITH ORGANIC VAPOUR, ACID GAS CARTRIDGE.

ENVIRONMENTAL PRECAUTIONS:

DO NOT ALLOW TO ENTER SEWERS/SURFACE OR GROUND WATER.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN-UP:

DYKE TO CONTROL SPILLAGE AND PREVENT ENVIRONMENTAL CONTAMINATION. DYKE WITH INERT MATERIAL (SAND, ASH, ETC.). NEUTRALIZATION OF MATERIAL MAY BE ACCOMPLISHED WITH SODA ASH, DILUTE CAUSTIC SODA OR LIME. ONLY TRAINED AND PROPERLY PROTECTED PERSONNEL SHOULD BE INVOLVED IN SPILL CLEAN-UP OPERATIONS. ELIMINATE ALL SOURCES OF IGNITION. VENTILATE CONTAMINATED AREA; RECOVER FREE LIQUID WITH SUITABLE PUMPS; ABSORB RESIDUE ON AN INERT SORBENT, SWEEP & PICK UP USING PLASTIC SHOVEL & STORE IN CLOSED CONTAINERS FOR RECYCLING OR DISPOSAL; ANY RESIDUE MAY BE NEUTRALIZED WITH SODIUM CARBONATE FOLLOWED BY RINSING TO SEWER.

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING PROCEDURES:

STORE BELOW 40°C. KEEP AWAY FROM SOURCES OF IGNITION AND SUBSTANCES LISTED IN PART 7. ALWAYS ENSURE THAT CONTAINERS WHEN EMPTY OR

FULL, OR PART FULL, ARE TIGHTLY SEALED UNLESS IN USE. AVOID BREATHING PRODUCT VAPOUR. USE WITH ADEQUATE VENTILATION. IF DEALING WITH A SPILL, VENTILATE WELL AND WEAR A SUITABLE RESPIRATOR WITH ORGANIC VAPOUR, ACID GAS CARTRIDGE. NEVER CUT, DRILL, WELD OR GRIND ON OR NEAR THIS CONTAINER. AVOID CONTACT WITH SKIN AND WASH WORK CLOTHES FREQUENTLY. AN EYE BATH AND SAFETY SHOWER MUST ALWAYS BE AVAILABLE NEAR THE WORKPLACE.

STORAGE REQUIREMENTS:

STORE AWAY FROM OXIDIZING MATERIALS AND ALL SOURCES OF IGNITION. KEEP CONTAINER CLOSED WHEN NOT IN USE.

INCOMPATIBLE MATERIALS:

DANGEROUSLY REACTIVE WITH STRONG OXIDIZING AGENTS AND STRONG ALKALIES. ALSO REACTS WITH MOST METALS (EXCEPT ALUMINIUM) TO PRODUCE HYDROGEN GAS. REACTS WITH PHOSPHOROUS TRICHLORIDE AND PHOPHOROUS ISOCYANCATE.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE LIMITS

| INGREDIENTS | ACGIH TLV OSHA PEL | | | | | |
|-------------|---------------------------|---------------------------|---------------------------|------------|--|--|
| | TWA | STEL | PEL | STEL | | |
| ACETIC ACID | 10ppm/25mg/m ³ | 15ppm/37mg/m ³ | 10ppm/25mg/m ³ | NOT LISTED | | |

SEE COMPOSITION/INFORMATION ON INGREDIENTS, SECTION 2.

ENGINEERING CONTROLS:

MECHANICAL VENTILATION MAY BE REQUIRED TO MAINTAIN AIRBORNE TITRE BELOW TWAEV. USE PROCESS ENCLOSURE, LOCAL EXHAUST VENTILATION TO MAINTAIN LEVELS BELOW EXPOSURE LIMITS. KEEP AWAY FROM FOODSTUFFS, BEVERAGES AND FEED. IMMEDIATELY REMOVE ALL SOILED AN DCONTAMINATED

| | CLOTHING. WASH HANDS BEFORE BREAKS AND AT THE END OF WORK. AVOID CONTACT WITH EYES AND SKIN. |
|--------------------------|---|
| GLOVES/TYPE: | BUTYL GLOVES RECOMMENDED – OTHER TYPES MAY ALSO PROTECT; CONSULT SUPPLIER TO CONFIRM SUITABILITY. |
| RESPIRATORY/TYPE: | A RESPIRATOR WITH ORGANIC VAPOUR, ACID GAS CARTIDGE MUST BE AVAILABLE |
| | FOR ESCAPE PURPOSES, SHOULD VENTILATION OR ENGINEERING CONTAINMENT FAIL. |
| EYE/TYPE: | TIGHTLY SEALED GOGGLES – ALWAYS PROTECT THE EYES. |
| CLOTHING/TYPE: | WEAR IMPERMEABLE (ABOVE) APRON, BOOTS & LONG SLEEVES IF THERE IS ANY DANGER OF SPLASHING. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| PHYSICAL STATE: ODOUR: | HYGROSCOPIC LIQUID VINEGAR ODOUR | APPEARANCE: CLEAR, CO | LOURLESS |
|---------------------------|-------------------------------------|-------------------------|-----------------|
| ODOUR THRESHOLD: | N/AV. | | |
| PH: | N/AV. | SPECIFIC GRAVITY: | 1.026 (20/20°C) |
| COEFFICIENT OF WATER/ | OIL | SOLUBILITY IN WATER: | COMPLETE |
| DISTRIBUTION: | N/ AV. | VAPOUR DENSITY (AIR=1): | N/AV. |
| EVAPOURATION RATE: | 1 (BUTYL ACETATE = 1) | | |
| BOILING POINT: | NO DATA AVAILABLE | | |
| FREEZING POINT: | -7°C | | |
| MOLECULAR WEIGHT: | 60GRAMS PER MOLE (GLACIAL) | | |
| MOLECULAR FORMULA: | CH ₃ COOH | | |
| | | | |

SECTION 10: REACTIVITY AND STABILITY DATA

REACTIVITY:DANGEROUSLY REACTIVE WITH STRONG OXIDIZING AGENTS AND STRONG ALKALIES. ALSO
REACTS WITH MOST METALS (EXCEPT ALUMINIUM) TO PRODUCE HYDROGEN GAS. REACTS
WITH PHOSPHOROUS TRICHLORIDE AND PHOPHOROUS ISOCYANCATE.STABILITY:STABLE UNDER NORMAL CONDITIONS. WILL NOT NORMALLY POLYMERIZE – POLYMERIZES

WITH ACETALDEHYDE.

CONDITIONS TO AVOID:

KEEP AWAY FROM HEAT & FLAME.

HAZARDOUS DECOMPOSITION PRODUCTS:

NONE. APART FROM HAZARDOUS COMBUSTION PRODUCTS.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE:ROUTES OF ENTRY INHALATION:YESROUTES OF ENTRY SKIN AND EYE:YESROUTES OF INGSTION:YESROUTES OF EXPOSURE SKIN ABSORPTION:YES

POTENTIAL HEALTH EFFECTS:

SIGNS AND SYMPTOMS OF SHORT-TERM (ACUTE) EXPOSURE

SIGN AND SYMPTOMS INHALATION

HARMFUL IF INHALED. MAY CAUSE SEVERE IRRITATION TO THE NOSE, THROAT AND RESPIRATORY TRACT. SYMPTOMS MAY INCLUDE COUGHING, CHOKING AND WHEEZING. INHALATION OF EXTREMELY HIGH CONCENTRATIONS COULD CAUSE PULMONARY EDEMA (FLUID ACCUMULATION). SYMPTOMS OF PULMONARY EDEMA (CHEST PAIN, SHORTNESS OF BREATH) MAY BE DELAYED.

SIGN AND SYMPTOMS INGESTION

HARMFUL IF SWALLOWED. MAY CAUSE SEVERE IRRITATION AND CORROSIVE DAMAGE IN THE MOUTH, THROAT AND STOMACH. SYMPTOMS MAY INCLUDE ABDOMINAL PAIN, VOMITING, BURNS, PERFORATIONS, BLEEDING AND EVENTUALLY DEATH.

SIGN AND SYMPTOMS SKIN :

HARMFUL IN CONTACT WITH SKIN. CAUSES SEVERE SKIN IRRITATION. MAY BE ABSORBED THROUGH THE SKIN.

SIGN AND SYMPTOMS EYES :

CAUSES SERIOUS EYE DAMAGE. CHEMICAL BURNS, CORNEAL DAMAGE AND POSSIBLY BLINDNESS CAN RESULT FROM DIRECT CONTACT.

POTENTIAL CHRONIC HEALTH EFFECTS

CHRONIC SKIN CONTACT WITH LOW CONCENTRATIONS MAY CAUSE DERMATITIS. PROLONGED OR REPEATED INHALATION OF FUMES OR VAPOURS, MAY CAUSE CHRONIC LUNG EFFECTS, SUCH AS BRONCHITIS, AND TOOTH ENAMEL EROSION.

MUTAGENICITY : NOT EXPECTED TO BE MUTAGENIC IN HUMANS.

CARCINOGENICITY : NO COMPONENTS ARE LISTED AS CARCINOGENS BY ACGIH, IARC, OSHA OR NTP.

REPRODUCTIVE EFFECTS & TERATOGENICITY : NOT EXPECTED TO CAUSE REPRODUCTIVE EFFECTS.

SENSITIZATION TO MATERIAL : NOT EXPECTED TO BE A SKIN OR RESPIRATORY SENSITIZER.

SPECIFIC TARGET ORGAN EFFECTS : EYES, SKIN, RESPIRATORY SYSTEM AND DIGESTIVE SYSTEM.

THIS MATERIAL IS CLASSIFIED AS HAZARDOUS UNDER CANADIAN WHMIS REGULATIONS (HAZARDOUS PRODUCTS REGULATIONS) (WHMIS 2015). CLASSIFICATION: SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE -CATEGORY 3 (RESPIRATORY) MAY CAUSE RESPIRATORY IRRITATION.

THE SUBSTANCE OR MIXTURE IS NOT CLASSIFIED AS SPECIFIC TARGET ORGAN TOXICANT, REPEATED EXPOSURE.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: PRE-EXISTING SKIN, EYE AND RESPIRATORY DISORDERS.

SYNERGISTIC MATERIALS : NOT AVAILABLE.

TOXICOLOGICAL DATA : SEE BELOW FOR TOXICOLGICAL DATA

| | LC50(4HR) | LD50 | LD50 |
|---------------------|-----------|-------------|------------------|
| CHEMICAL NAME | INH, RAT | (ORAL, RAT) | (RABBIT, DERMAL) |
| ACETIC ACID GLACIAL | 11.4 mg/L | 3310 mg/kg | 1060 mg/kg |

OTHER IMPORTANT TOXICOLOGICAL HAZARDS : NONE KNOWN OR REPORTED BY THE MANUFACTURER.

SECTION 12: ECOLOGICAL INFORMATION

IMPORTANT ENVIRONMENTAL CHARACTERISTICS:

THIS PRODUCT IS READILY BIODEGRADEABLE AND IS READILY METABOLIZED BY ALL LIVING CREATURES AND CANNOT BIOACCUMULATE. THIS PRODUCT DEGRADES READILY AND RAPIDLY IN THE PRESENCE OF OXYGEN; 58% BIODEGRADATION IN 5 DAYS. THIS PRODUCT REACTS WITH ATMOSPHERIC HYDROXYL RADICALS; ITS ESTIMATED HALF-LIFE IN AIR IS 22 DAYS; HOWEVER RAIN WILL KNOCK DOWN ANY VAPOUR VERY RAPIDLY. THIS PRODUCT IS WATER SOLUBLE AND WILL MOVE READILY IN SOIL AND WATER, HOWEVER, SOIL BIOTA MAY WELL METABOLIZE IT BEFORE IT REACHES AN AQUIFER. WATER HAZARD CLASS 1: SLIGHTLY HAZARDOUS FOR WATER.

ECOTOXICOLOGICAL:

LC50 (FISH 96HR) EC50 (DAPHNIA 48HR) EC50 (GREEN ALGAE 96 OR 72HR) >300.82mg/L 65mg/L (WATER FLEA) 37.9mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

METHOD OF DISPOSAL:

CONTAINERS:

DO NOT FLUSH TO SEWER, RECYCLE IF POSSIBLE, MAY BE INCINERATED IN APPROVED FACILITY. DRUMS SHOULD BE REUSED. RECONDITION AND PRESSURE TEST BY A LICENSED RECONDITIONER PRIOR TO RE-USE. PAILS MUST BE VENTED AND THOROUGHLY DRIED PRIOR TO CRUSHING AND RECYCLING. IBC'S (INTERMEDIATE BULK CONTAINERS) POLYETHYLENE BOTTLE MUST BE PRESSURE TESTED AND RECERTIFIED AT 30 MONTHS. REPLACE AT 60 MONTHS (5YRS). STEEL CONTAINERS MUST BE INSPECTED, PRESSURE TESTED AND RECERTIFIED EVERY 5 YEARS. NEVER CUT, DRILL, WELD OR GRIND ON OR NEAR THIS CONTAINER, EVEN IF EMPTY.

SECTION 14: TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: ACETIC ACID SOLUTION 20% TDG, 49CFR/DOT, ICAO/IATA, IMDG CLASSIFICATIONS: : CLASS 8, UN 2790, PACKING GROUP III MARINE POLLUTANT: NOT A MARINE POLLUTANT

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION: SEE SECTION 2

US FEDERAL INFORMATION: COMPONENTS LISTED BELOW ARE PRESENT ON THE FOLLOWING U.S. FEDERAL CHEMICAL LISTS:

| INGREDIENTS | CAS # | TSCA INVENT | CERCLA REPORTABLE QUANTITY(RQ) | SARA TITLE III: SEC. 302 EXTREMELY | SARA TITLE III: S | EC 313, 40 CFR |
|------------------------|---------|----------------|--------------------------------------|--|-------------------|----------------------------|
| INOREDIENTS | | ORY | (40 CFR 117.302) | HAZARDOUS SUBSTANCE, 40 CFR 355 | TOXIC CHEMICAL | DEMINIMUS CONCENTRATION |
| ACETIC ACID GLACIAL | 64-19-7 | YES | 5000LB/2270KG | N/AP | NO | N/AP |

SARA TITLE III: SEC. 313, TOXIC CHEMICALS NOTIFICATION, 40 CFR 372: FIRE HAZARD; ACUTE HEALTH HAZARD.

UNDER SARA SECTIONS 311 AND 312, THE EPA HAS ESTABLISHED THRESHOLD QUANTITIES FOR THE REPORTING OF HAZARDOUS CHEMICALS. THE CURRENT THRESHOLDS ARE 500 POUNDS OR THE THRESHOLD PLANNING QUANTITY (TPQ), WHICHEVER IS LOWER, FOR EXTREMELY HAZARDOUS SUBSTANCES AND 10,000 POUNDS FOR ALL OTHER HAZARDOUS CHEMICALS.

US STATE RIGHT TO KNOW LAWS:

THE FOLLOWING CHEMICALS ARE SPECIFICALLY LISTED BY INDIVIDUAL STATES:

| INGREDIENTS | CAS # | CALIFO | RNIA PROPOSITION 65 | | STATE '' | RIGHT | ΓΟ ΚΝΟΥ | V'' LISTS | 5 |
|-------------|---------|--------|---------------------|-----|----------|-------|---------|-----------|-----|
| INGREDIENIS | CAS# | LISTED | TYPE OF TOXICITY | CA | MA | MN | NJ | РА | RI |
| ACETIC ACID | | | | | | | | | |
| GLACIAL | 64-19-7 | NO | N/AP | YES | YES | YES | YES | YES | YES |

CANADIAN INFORMATION:

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) INFORMATION: ALL INGREDIENTS LISTED APPEAR ON THE DOMESTIC SUBSTANCES

LIST (DSL).

WHMIS INFORMATION: REFER TO SECTION 2 FOR A WHMIS CLASSIFICATION FOR THIS PRODUCT.

INTERNATIONAL INFORMATION:

COMPONENTS LISTED BELOW ARE PRESENT ON THE FOLLOWING INTERNATIONAL INVENTORY LIST:

| INGREDIENTS | CAS # | EUROPEAN EINECS | AUSTRALIA AICS | PHILIPPINES PICCS | JAPAN ENCS | KOREA KECI/KECL | CHINA IECS | NEW ZEALAND IOC |
|------------------------|---------|--------------------|-------------------|----------------------|---------------|--------------------|---------------|---|
| ACETIC ACID GLACIAL | 64-19-7 | 200-580-7 | PRESENT | PRESENT | (2)-688 | KE-00013 | PRESENT | HSR000975, HSR001580, HSR001581, HSR001582 (DILUTION) |

| | | SECTION 16: OTHER INFORMATION |
|-------------|-------------|---|
| | | |
| LEGEND: | ACGIH | AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS |
| | CAS # | CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER |
| | EC | EFFECTIVE CONCENTRATION |
| | LC | LETHAL CONCENTRATION |
| | LD | LETHAL DOSE |
| | MSHA | MINE SAFETY AND HEALTH ADMINISTRATION |
| | N/AP. | NOT APPLICABLE |
| | N/AV. | NOT AVAILABLE |
| | NIOSH | NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH |
| | OSHA | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION |
| | PEL | PERMISSIBLE EXPOSURE LIMIT |
| | SCBA | SELF CONTAINED BREATHING APPARATUS |
| | STEL | SHORT TERM EXPOSURE LIMIT |
| | TDG | TRANSPORTATION OF DANGEROUS GOODS ACT/REGULATIONS |
| | TLV | THRESHOLD LIMIT VALUE |
| | TWAEV | TIME WEIGHTED AVERAGE EXPOSURE VALUE |
| | WHMIS | WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM |
| PREPARED BY | : | UBA INC. |
| | - | TEL: 905-827-4133 |
| | | FAX: 905-827-4145 |
| MSDS PREPAR | ATION DATE: | OCTOBER 17, 2023 |

DISCLAIMER OF LIABILITY

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